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# FCC TEST REPORT

| Application No.:        | ZR/2021/40016   |  |  |
|-------------------------|---|--|--|
| Applicant:              | Guangdong OPPO Mobile Telecommunications Corp., Ltd.                                |  |  |
| Address of Applicant    | NO.18 Haibin Road, Wusha Village, Chang'an Town, Dongguan City, Guangdong,<br>China |  |  |
| Manufacturer:           | Guangdong OPPO Mobile Telecommunications Corp., Ltd.                                |  |  |
| Address of Manufacturer | NO.18 Haibin Road, Wusha Village, Chang'an Town, Dongguan City, Guangdong,<br>China |  |  |
| EUT Description:        | Mobile Phone  |  |  |
| Model No.:              | CPH2251   |  |  |
| Trade Mark:             | OPPO  |  |  |
| FCC ID:                 | R9C-CPH2251   |  |  |
| Standards:              | 47 CFR FCC Part 2, Subpart J  |  |  |
|                         | 47 CFR Part 15, Subpart C   |  |  |
| Date of Receipt:        | 2021/4/21   |  |  |
| Date of Test:           | 2021/4/21 to 2021/6/8   |  |  |
| Date of Issue:          | 2021/6/10   |  |  |
| Test Result :           | PASS *  |  |  |

In the configuration tested, the EUT detailed in this report complied with the standards specified above.

Authorized Signature:

Derele yang

Derek Yang Wireless Laboratory Manager

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# 1 Version

|         |         | <b>Revision Record</b> |          |          |
|---------|---------|------------------------|----------|----------|
| Version | Chapter | Date                   | Modifier | Remark   |
| 01      |         | 2021-06-10             |          | Original |
|         |         |                        |          |          |
|         |         |                        |          |          |

| Authorized for issue by: |                        |
|--------------------------|------------------------|
| Prepared By              | Dee.Zheng              |
|                          | (Dee Zheng) / Engineer |
| Checked By               | John Hong              |
|                          | (Jim Huang) / Reviewer |



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# 2 Test Summary

| Test Item   | Test Requirement        | Test Method      | Test<br>Result | Result | Test<br>Lab* |
|---|-------------------------|------------------|----------------|--------|--------------|
| AC Power Line<br>Conducted Emission                                     | 15.207                  | ANSI C63.10 2013 | Clause 4.2     | PASS   | В            |
| Duty Cycle  |                         |                  | Clause 4.3     | PASS   | А            |
| Conducted Output Power  | 15.247 (b)(3)           | ANSI C63.10 2013 | Clause 4.4     | PASS   | А            |
| DTS (6 dB) Bandwidth & 99%<br>Occupied Bandwidth                        | 15.247 (a)(2)           | ANSI C63.10 2013 | Clause 4.5     | PASS   | А            |
| Power Spectral Density  | 15.247 (e)              | ANSI C63.10 2013 | Clause 4.6     | PASS   | А            |
| Band-edge for RF<br>Conducted Emissions                                 | 15.247(d)               | ANSI C63.10 2013 | Clause 4.7     | PASS   | А            |
| RF Conducted Spurious<br>Emissions                                      | 15.247(d)               | ANSI C63.10 2013 | Clause 4.8     | PASS   | А            |
| Radiated Spurious Emissions   | 15.247(d);15.205/15.209 | ANSI C63.10 2013 | Clause 4.9     | PASS   | В            |
| Restricted bands around<br>fundamental frequency<br>(Radiated Emission) | 15.247(d);15.205/15.209 | ANSI C63.10 2013 | Clause 4.10    | PASS   | В            |

Remark : All test were performed by Lab A and B.

Lab A SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Lab B SGS-CSTC STANDARDS TECHNICAL SERVICES (XI 'AN) CO., LTD.



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# **3** General Information

# 3.1 Details of Client

| Applicant:              | Guangdong OPPO Mobile Telecommunications Corp., Ltd.                                |
|-------------------------|---|
| Address of Applicant    | NO.18 Haibin Road, Wusha Village, Chang'an Town, Dongguan City,<br>Guangdong, China |
| Manufacturer:           | Guangdong OPPO Mobile Telecommunications Corp., Ltd.                                |
| Address of Manufacturer | NO.18 Haibin Road, Wusha Village, Chang'an Town, Dongguan City, Guangdong, China    |

# 3.2 Test Location

#### Lab A:

| Company:       | SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch                                |
|----------------|--|
| Address:       | No. 1 Workshop, M-10, Middle section, Science & Technology Park,<br>Shenzhen, Guangdong, China |
| Post code:     | 518057   |
| Test engineer: | Dee Zheng,Swing Hu,Habit Zeng  |

#### Lab B:

| Company:   | SGS-CSTC STANDARDS TECHNICAL SERVICES (XI 'AN) CO., LTD. |
|--|--|
| Address: 1/F, Unit D, Building 1, Kanghong Orange Technology Park, No.137, Ke<br>3rd Road, Fengdong New City, Xi'an, Shaanxi China |  |
| Post code:   | 710086   |
| Test engineer:   | Leah Chen,Ken Liu,Andy Yao                               |



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# SGS

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# 3.3 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

Lab A:

#### • A2LA (Certificate No. 3816.01)

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

#### • VCCI

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

#### • FCC – Designation Number: CN1178

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1178. Test Firm Registration Number: 406779.

#### Innovation, Science and Economic Development Canada

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006.

IC#: 4620C.

Lab B:

#### A2LA (Certificate No. 4854.01)

SGS-CSTC STANDARDS TECHNICAL SERVICES (XI 'AN) CO., LTD. is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 4854.01.

FCC-Designation Number: CN1271.



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# 3.4 General Description of EUT

| EUT Description:                   | Mobile Phone  |
|------------------------------------|---|
| Model No.:                         | CPH2251   |
| Trade Mark:                        | OPPO  |
| Hardware Version:                  | 11  |
| Software Version:                  | ColorOS V11.3   |
| IEEE 802.11 WLAN Mode<br>Supported | <ul> <li>☑ 802.11B (20 MHz channel bandwidth),</li> <li>☑ 802.11G (20 MHz channel bandwidth)</li> <li>☑ 802.11N/AC/AX (20 MHz channel bandwidth),</li> <li>☑ 802.11N/AC/AX (40 MHz channel bandwidth)</li> </ul>                      |
| Operation Frequency:               | 2400 MHz -2483.5MHz<br>fc = 2407 MHz + N * 5 MHz, where:<br>-fc = "Operating Frequency" in MHz,<br>-N = "Channel Number" with the range from 1 to 11 for the 20 MHz<br>channel bandwidth, or 3 to 9 for the 40 MHz channel bandwidth. |
| Type of Modulation:                | IEEE for 802.11B: DSSS<br>IEEE for 802.11G : OFDM<br>IEEE for 802.11N(HT20)/AC(VHT20)/AX(VHE20) : OFDM/OFDMA<br>IEEE for 802.11N(HT40)/AC(VHT40)/AX(VHE40) : OFDM/OFDMA   |
| Sample Type:                       | ⊠ Portable Device, □Module  |
| Antenna Type:                      | External, 🛛 Integrated  |
| Antenna Ports                      | 🖂 Ant 2, 🖂 Ant 7  |
| Smart System                       | <ul> <li>☑ SISO (for 802.11B/G/N/AC/AX),</li> <li>☑ MIMO (for 802.11B/G/N/AC/AX): 2 Tx &amp; 2 Rx,</li> <li>☑ Diversity (for 802.11B/G): Tx &amp; Rx</li> </ul>   |
| Antenna Gain:                      | -5dBi(ANT2); -3.5dBi(ANT7);   |

| (       | Operation Frequency of each channel (802.11B/G/N HT20 AC VHT20 AX VHE20) |         |           |         |           |         |           |
|---------|--|---------|-----------|---------|-----------|---------|-----------|
| Channel | Frequency  | Channel | Frequency | Channel | Frequency | Channel | Frequency |
| 1       | 2412MHz  | 4       | 2427MHz   | 7       | 2442MHz   | 10      | 2457MHz   |
| 2       | 2417MHz  | 5       | 2432MHz   | 8       | 2447MHz   | 11      | 2462MHz   |
| 3       | 2422MHz  | 6       | 2437MHz   | 9       | 2452MHz   |         |           |
|         | Operation Frequency of each channel (802.11N HT40 AC VHT40 AX VHE40)     |         |           |         |           |         |           |
| Channel | Frequency  | Channel | Frequency | Channel | Frequency | Channel | Frequency |
| 3       | 2422MHz  | 6       | 2437MHz   | 9       | 2452MHz   |         |           |
| 4       | 2427MHz  | 7       | 2442MHz   |         |           |         |           |
| 5       | 2432MHz  | 8       | 2447MHz   |         |           |         |           |



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#### Remark:

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

| Channel             | Frequency for 802.11B/G/N<br>(HT20)/AC(VHT20)/AX(VHE20) | Frequency for 802.11N<br>(HT40)/AC(VHT40)/AX(VHE40) |
|---------------------|---|---|
| The Lowest channel  | 2412MHz   | 2422MHz   |
| The Middle channel  | 2437MHz   | 2437MHz   |
| The Highest channel | 2462MHz   | 2452MHz   |

# 3.5 Test Environment and Mode

| Operating Environment: |  |
|------------------------|--|
| Temperature:           | 25.0 °C  |
| Humidity:              | 50 % RH  |
| Atmospheric Pressure:  | 101.30 KPa   |
| Test mode:             |  |
| Transmitting mode:     | Keep the EUT in transmitting mode with all kind of modulation and all kind of data rate. |

# 3.6 Description of Support Units

The EUT has been tested independent unit.



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# 4 Test results and Measurement Data

### 4.1 Antenna Requirement

Standard requirement: 47 CFR Part 15C Section 15.203 /247(c)

15.203 requirement:

An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.

15.247(b) (4) requirement:

The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is-5dBi(ANT2); -3.5dBi(ANT7).



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# 4.2 AC Power Line Conducted Emissions

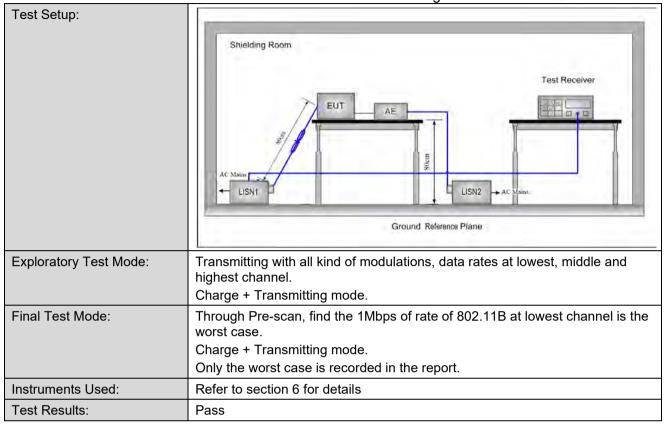
| Test Requirement:     | 47 CFR Part 15C Section 15.207  |   |   |  |
|-----------------------|---|---|---|--|
| Test Method:          | ANSI C63.10: 2013   |   |   |  |
| Test Frequency Range: | 150kHz to 30MHz   |   |   |  |
| Limit:                | Ereguenov rongo (MHz)   | Limit (d  | BuV)  |  |
|                       | Frequency range (MHz)   | Quasi-peak  | Average   |  |
|                       | 0.15-0.5  | 66 to 56*   | 56 to 46*   |  |
|                       | 0.5-5   | 56  | 46  |  |
|                       | 5-30  | 60  | 50  |  |
|                       | * Decreases with the log  | arithm of the frequency.  |   |  |
| Test Procedure:       | room.<br>2) The EUT was connect<br>Impedance Stabilization<br>impedance. The power of<br>a second LISN 2, which<br>plane in the same way a<br>multiple socket outlet str<br>single LISN provided the<br>3) The tabletop EUT was<br>ground reference plane.<br>placed on the horizontal<br>4) The test was perform<br>of the EUT shall be 0.4 r<br>vertical ground reference<br>reference plane. The LIS<br>unit under test and bond<br>mounted on top of the gr<br>between the closest poir<br>the EUT and associated<br>In order to find the maxin<br>equipment and all of the | isturbance voltage test was concerned to AC power source throw<br>Network) which provides a 50<br>cables of all other units of the<br>was bonded to the ground reference and the LISN 1 for the unit being<br>ip was used to connect multiple<br>arating of the LISN was not ex-<br>us placed upon a non-metallic<br>And for floor-standing arranger<br>ground reference plane,<br>ned with a vertical ground reference plane<br>for the vertical ground reference plane<br>be plane was bonded to the hole<br>SN 1 was placed 0.8 m from the<br>led to a ground reference plane<br>round reference plane. This dia<br>to f the LISN 1 and the EUT<br>equipment was at least 0.8 m<br>mum emission, the relative po<br>interface cables must be cha<br>conducted measurement. | ugh a LISN 1 (Line<br>$\Omega\Omega/50\mu$ H + 5Ω linear<br>EUT were connected to<br>rerence<br>g measured. A<br>ble power cables to a<br>acceeded.<br>table 0.8m above the<br>ement, the EUT was<br>rence plane. The rear<br>erence plane. The rear<br>erence plane. The<br>rizontal ground<br>he boundary of the<br>he for LISNs<br>istance was<br>All other units of<br>h from the LISN 2.<br>sitions of |  |



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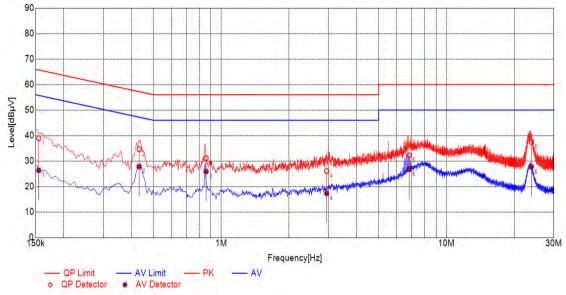


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#### Measurement Data

An initial pre-scan was performed on the live and neutral lines with peak detector. Quasi-Peak and Average measurement were performed at the frequencies with maximized peak emission were detected.

Live Line:



#### **Test Graph**

| Final | Final Data List |                |                       |                       |                      |                       |                       |                      |
|-------|-----------------|----------------|-----------------------|-----------------------|----------------------|-----------------------|-----------------------|----------------------|
| NO.   | Freq.<br>[MHz]  | Factor<br>[dB] | QP<br>Value<br>[dBµV] | QP<br>Limit<br>[dBµV] | QP<br>Margin<br>[dB] | AV<br>Value<br>[dBµV] | AV<br>Limit<br>[dBµV] | AV<br>Margin<br>[dB] |
| 1     | 0.1550          | 10.10          | 38.94                 | 65.73                 | 26.79                | 26.33                 | 55.73                 | 29.40                |
| 2     | 0.4325          | 10.10          | 34.63                 | 57.20                 | 22.57                | 27.85                 | 47.20                 | 19.35                |
| 3     | 0.8570          | 10.10          | 31.16                 | 56.00                 | 24.84                | 25.88                 | 46.00                 | 20.12                |
| 4     | 2.9397          | 10.10          | 26.10                 | 56.00                 | 29.90                | 17.35                 | 46.00                 | 28.65                |
| 5     | 6.8205          | 10.10          | 32.30                 | 60.00                 | 27.70                | 26.73                 | 50.00                 | 23.27                |
| 6     | 23.8503         | 10.11          | 37.43                 | 60.00                 | 22.57                | 27.75                 | 50.00                 | 22.25                |



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Report No.: ZR/2021/4001604 Page: 13 of 146 Neutral Line: 90 80 70 60 Level[dBµV] 50 40 þ 30 20 10 150k 1M 10M 30M Frequency[Hz] QP Limit AV Limit PK AV o QP Detector AV Detector

#### Test Graph

| Final | Final Data List |                |                       |                       |                      |                       |                       |                      |
|-------|-----------------|----------------|-----------------------|-----------------------|----------------------|-----------------------|-----------------------|----------------------|
| NO.   | Freq.<br>[MHz]  | Factor<br>[dB] | QP<br>Value<br>[dBµV] | QP<br>Limit<br>[dBµV] | QP<br>Margin<br>[dB] | AV<br>Value<br>[dBµV] | AV<br>Limit<br>[dBµV] | AV<br>Margin<br>[dB] |
| 1     | 0.1660          | 10.10          | 37.50                 | 65.16                 | 27.66                | 25.38                 | 55.16                 | 29.78                |
| 2     | 0.4348          | 10.10          | 37.15                 | 57.16                 | 20.01                | 32.29                 | 47.16                 | 14.87                |
| 3     | 0.8526          | 10.10          | 29.56                 | 56.00                 | 26.44                | 23.30                 | 46.00                 | 22.70                |
| 4     | 3.0702          | 10.10          | 25.35                 | 56.00                 | 30.65                | 17.43                 | 46.00                 | 28.57                |
| 5     | 12.6005         | 10.11          | 33.66                 | 60.00                 | 26.34                | 29.10                 | 50.00                 | 20.90                |
| 6     | 23.8370         | 10.11          | 37.53                 | 60.00                 | 22.47                | 27.94                 | 50.00                 | 22.06                |

#### Remark:

- 1. The following Quasi-Peak and Average measurements were performed on the EUT:
- 2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.



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# 4.3 Duty Cycle

The detailed test data see: Appendix



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### 4.4 Conducted Output Power

| Test Requirement:      | 47 CFR Part 15C Section 15.247 (b)(3)   |  |  |
|------------------------|---|--|--|
| Test Method:           | ANSI C63.10 :2013 Section 11.9.1.3  |  |  |
| Test Setup:            | POWER METER E.U.T<br>Non-Conducted Table<br>Ground Reference Plane  |  |  |
| Test Instruments:      | Refer to section 6 for details  |  |  |
| Exploratory Test Mode: | Transmitting with all kind of modulations, data rates   |  |  |
| Final Test Mode:       | Through Pre-scan, find the<br>1Mbps of rate is the worst case of 802.11B;<br>6Mbps of rate is the worst case of 802.11G ;<br>6.5Mbps of rate is the worst case of 802.11N(HT20)/AC(VHT20)/AX(VHE20);<br>13.5Mbps of rate is the worst case of 802.11N(HT40)/ AC(VHT40)/AX(VHE40). |  |  |
| Limit:                 | 30dBm   |  |  |
| Test Results:          | Pass  |  |  |

The detailed test data see: Appendix



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# 4.5 DTS (6 dB) Bandwidth & 99% Occupied Bandwidth

| Test Requirement:      | 47 CFR Part 15C Section 15.247 (a)(2)   |  |  |
|------------------------|---|--|--|
| Test Method:           | ANSI C63.10: 2013 Section 11.8.1 Option 1   |  |  |
| Test Setup:            | Spectrum Analyzer<br>E.U.T<br>Non-Conducted Table<br>Ground Reference Plane   |  |  |
| Instruments Used:      | Refer to section 6 for details  |  |  |
| Exploratory Test Mode: | Transmitting with all kind of modulations, data rates   |  |  |
| Final Test Mode:       | Through Pre-scan, find the<br>1Mbps of rate is the worst case of 802.11B;<br>6Mbps of rate is the worst case of 802.11G ;<br>6.5Mbps of rate is the worst case of 802.11N(HT20)/AC(VHT20)/AX(VHE20);<br>13.5Mbps of rate is the worst case of 802.11N(HT40)/ AC(VHT40)/AX(VHE40). |  |  |
| Limit:                 | ≥ 500 kHz   |  |  |
| Test Results:          | Pass  |  |  |

The detailed test data see: Appendix



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### 4.6 Power Spectral Density

| Test Requirement:      | 47 CFR Part 15C Section 15.247 (e)  |  |  |
|------------------------|---|--|--|
| Test Method:           | ANSI C63.10 :2013 Section 11.10.2   |  |  |
| Test Setup:            | Spectrum Analyzer<br>E.U.T<br>Non-Conducted Table<br>Ground Reference Plane   |  |  |
| Test Instruments:      | Refer to section 6 for details  |  |  |
| Exploratory Test Mode: | Transmitting with all kind of modulations, data rates   |  |  |
| Final Test Mode:       | Through Pre-scan, find the<br>1Mbps of rate is the worst case of 802.11B;<br>6Mbps of rate is the worst case of 802.11G ;<br>6.5Mbps of rate is the worst case of 802.11N(HT20)/AC(VHT20)/AX(VHE20);<br>13.5Mbps of rate is the worst case of 802.11N(HT40)/ AC(VHT40)/AX(VHE40). |  |  |
| Limit:                 | ≤8.00dBm/3kHz   |  |  |
| Test Results:          | Pass  |  |  |

The detailed test data see: Appendix



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# 4.7 Band-edge for RF Conducted Emissions

| Test Requirement:      | 47 CFR Part 15C Section 15.247 (d)  |  |  |
|------------------------|---|--|--|
| Test Method:           | ANSI C63.10: 2013 Section 11.13   |  |  |
| Test Setup:            | Spectrum Analyzer<br>E.U.T<br>Non-Conducted Table<br>Ground Reference Plane   |  |  |
| Instruments Used:      | Refer to section 6 for details  |  |  |
| Exploratory Test Mode: | Transmitting with all kind of modulations, data rates   |  |  |
| Final Test Mode:       | Through Pre-scan, find the<br>1Mbps of rate is the worst case of 802.11B;<br>6Mbps of rate is the worst case of 802.11G ;<br>6.5Mbps of rate is the worst case of 802.11N(HT20)/AC(VHT20)/AX(VHE20);<br>13.5Mbps of rate is the worst case of 802.11N(HT40)/ AC(VHT40)/AX(VHE40).   |  |  |
| Limit:                 | In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. |  |  |
| Test Results:          | Pass  |  |  |

The detailed test data see: Appendix



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### 4.8 **RF Conducted Spurious Emissions**

| Test Requirement:      | 47 CFR Part 15C Section 15.247 (d)  |  |  |
|------------------------|---|--|--|
| Test Method:           | ANSI C63.10: 2013 Section 11.11   |  |  |
| Test Setup:            | Spectrum Analyzer<br>E.U.T<br>Non-Conducted Table<br>Ground Reference Plane   |  |  |
| Instruments Used:      | Refer to section 6 for details  |  |  |
| Exploratory Test Mode: | Transmitting with all kind of modulations, data rates   |  |  |
| Final Test Mode:       | Through Pre-scan, find the<br>1Mbps of rate is the worst case of 802.11B;<br>6Mbps of rate is the worst case of 802.11G ;<br>6.5Mbps of rate is the worst case of 802.11N(HT20)/AX(HE20);<br>13.5Mbps of rate is the worst case of 802.11N(HT40)/AX(HE40).  |  |  |
| Limit:                 | In any 100 kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement. |  |  |
| Test Results:          | Pass  |  |  |

The detailed test data see: Appendix



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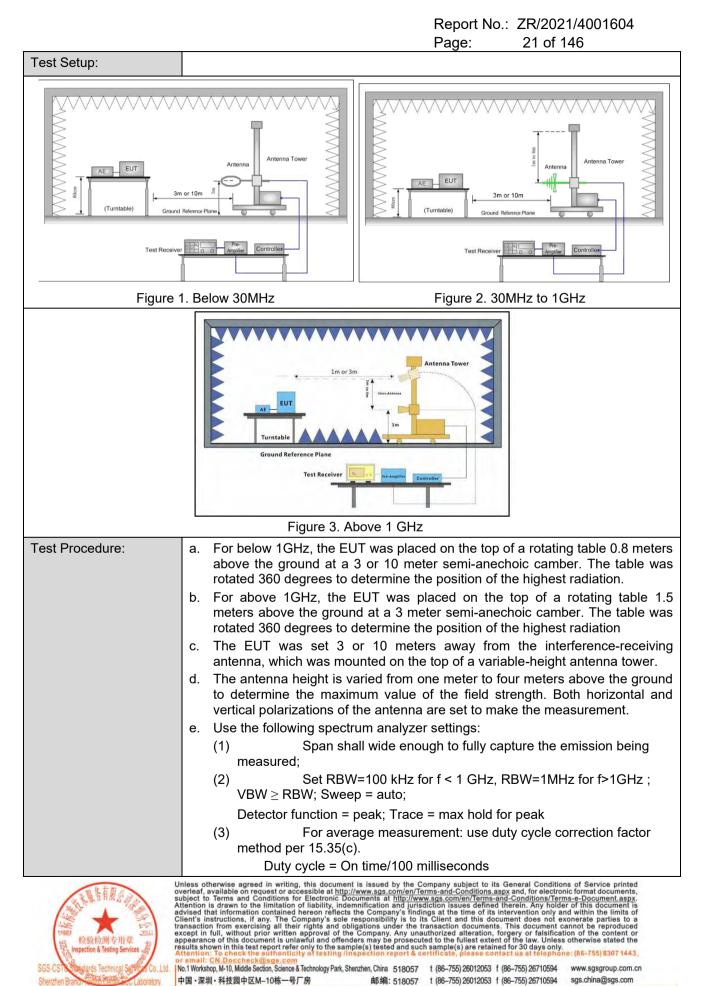
# 4.9 Radiated Spurious Emissions

| Test Requirement: | 47 CFR Part 15C Section 15.209 and 15.205   |   |                   |            |                             |  |  |
|-------------------|---|---|-------------------|------------|-----------------------------|--|--|
| Test Method:      | ANSI C63.10 :2013 Section 11.12   |   |                   |            |                             |  |  |
| Test Site:        | Measurement Distance:   | Measurement Distance: 3m or 10m (Semi-Anechoic Chamber) |                   |            |                             |  |  |
| Receiver Setup:   | Frequency Detector RBW VBW Re   |   |                   |            | Remark                      |  |  |
|                   | 0.009MHz-0.090MHz   | Peak  | 10kHz             | 30kHz      | Peak                        |  |  |
|                   | 0.009MHz-0.090MHz   | Average   | 10kHz             | 30kHz      | Average                     |  |  |
|                   | 0.090MHz-0.110MHz   | Quasi-peak  | 10kHz             | 30kHz      | Quasi-peak                  |  |  |
|                   | 0.110MHz-0.490MHz   | Peak  | 10kHz             | 30kHz      | Peak                        |  |  |
|                   | 0.110MHz-0.490MHz   | Average   | 10kHz             | 30kHz      | Average                     |  |  |
|                   | 0.490MHz -30MHz   | Quasi-peak  | 10kHz             | 30kHz      | Quasi-peak                  |  |  |
|                   | 30MHz-1GHz  | Quasi-peak  | 120kHz            | 300kHz     | Quasi-peak                  |  |  |
|                   |   | Peak  | 1MHz              | 3MHz       | Peak                        |  |  |
|                   |   | Peak  | 1MHz              | 10Hz       | Average                     |  |  |
|                   | Above 1GHz  |   |                   | (DC≥0.98)  |                             |  |  |
|                   |   |   |                   | ≥1/T       |                             |  |  |
|                   |   |   |                   | (DC<0.98)  |                             |  |  |
| Limit:            | Frequency   | Field strength<br>(microvolt/meter)                     | Limit<br>(dBuV/m) | Remark     | Measurement<br>distance (m) |  |  |
|                   | 0.009MHz-0.490MHz   | 2400/F(kHz)   | -                 | -          | 300                         |  |  |
|                   | 0.490MHz-1.705MHz   | 24000/F(kHz)  | -                 | -          | 30                          |  |  |
|                   | 1.705MHz-30MHz  | 30  | -                 | -          | 30                          |  |  |
|                   | 30MHz-88MHz   | 100   | 40.0              | Quasi-peak | 3                           |  |  |
|                   | 88MHz-216MHz  | 150   | 43.5              | Quasi-peak | 3                           |  |  |
|                   | 216MHz-960MHz   | 200   | 46.0              | Quasi-peak | 3                           |  |  |
|                   | 960MHz-1GHz   | 500   | 54.0              | Quasi-peak | 3                           |  |  |
|                   | Above 1GHz  | 500   | 54.0              | Average    | 3                           |  |  |
|                   | Remark: 15.35(b),Unless otherwise specified, the limit on peak radio frequency<br>emissions is 20dB above the maximum permitted average emission limit<br>applicable to the equipment under test. This peak limit applies to the total peak<br>emission level radiated by the device. |   |                   |            |                             |  |  |



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|                        | <ul> <li>On time = N 1 *L 1 +N 2 *L 2 ++N n-1 *LN n-1 +N n *L n</li> <li>Where N 1 is number of type 1 pulses, L 1 is length of type 1 pulses, etc.</li> <li>Average Emission Level = Peak Emission Level + 20*log(Duty cycle)</li> <li>f. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters(for the test frequency of below 30MHz, the antenna was tuned to heights 1 meter) and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.</li> <li>g. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</li> <li>h. If the emission level of the EUT in peak mode was 10dB lower than the limit specified, then testing could be stopped and the peak values of the EUT would be reported. Otherwise the emissions that did not have 10dB margin would be re-tested one by one using peak, quasi-peak or average method as specified and then reported in a data sheet.</li> <li>i. Test the EUT in the lowest channel, the middle channel ,the Highest channel.</li> <li>j. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode, And found the X axis positioning which it is worse case.</li> <li>k. Repeat above procedures until all frequencies measured was complete.</li> </ul> |  |
| Exploratory Test Mode: | Transmitting with all kind of modulations, data rates.<br>Charge + Transmitting mode.   |  |
| Final Test Mode:       | Pretest the EUT at Charge + Transmitting mode.<br>Through Pre-scan, find the<br>1Mbps of rate is the worst case of 802.11B;<br>6Mbps of rate is the worst case of 802.11G;<br>6.5Mbps of rate is the worst case of 802.11N(HT20)/AC(VHT20)/AX(VHE20);<br>13.5Mbps of rate is the worst case of 802.11N(HT40)/ AC(VHT40)/AX(VHE40).<br>For below 1GHz, through Pre-scan, find the 1Mbps of rate of 802.11B at lowest<br>channel is the worst case. Only the worst case is recorded in the report.  |  |
| Instruments Used:      | Refer to section 6 for details  |  |
|                        |   |  |

The detailed test data see: Appendix

Pass

Test Results:



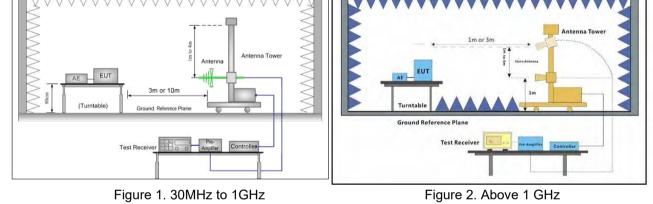
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### 4.10Restricted bands around fundamental frequency

| Test Requirement: | st Requirement: 47 CFR Part 15C Section 15.209 and 15.205 |   |               |  |  |  |
|-------------------|---|---|---------------|--|--|--|
| Test Requirement. |   |   |               |  |  |  |
| Test Method:      | ANSI C63.10: 2013 Section                                 | ANSI C63.10: 2013 Section 11.12                         |               |  |  |  |
| Test Site:        | Measurement Distance: 3m                                  | Measurement Distance: 3m or 10m (Semi-Anechoic Chamber) |               |  |  |  |
| Limit:            | Frequency   | Frequency Limit (dBuV/m) Remark                         |               |  |  |  |
|                   | 30MHz-88MHz   | 40.0  | Quasi-peak    |  |  |  |
|                   | 88MHz-216MHz  | 43.5  | Quasi-peak    |  |  |  |
|                   | 216MHz-960MHz   | 46.0  | Quasi-peak    |  |  |  |
|                   | 960MHz-1GHz   | 54.0  | Quasi-peak    |  |  |  |
|                   | Above 1GHz  | 54.0  | Average Value |  |  |  |
|                   | Above IGHZ  | 74.0  | Peak Value    |  |  |  |
| Test Setup:       | Test Setup:   |   |               |  |  |  |
|                   |   |   |               |  |  |  |





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| Test Procedure:        | <ul> <li>a. For below 1GHz, the EUT was placed on the top of a rotating table 0.8 meters above the ground at a 3 or 10 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.</li> <li>b. For above 1GHz, the EUT was placed on the top of a rotating table 1.5 meters above the ground at a 3 meter semi-anechoic camber. The table was rotated 360 degrees to determine the position of the highest radiation.</li> <li>c. The EUT was set 3 or 10 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.</li> <li>d. The antenna height is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.</li> <li>e. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the maximum reading.</li> <li>f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.</li> <li>g. Place a marker at the end of the restricted band closest to the transmit frequency to show compliance. Also measure any emissions in the restricted bands. Save the spectrum analyzer plot. Repeat for each power and modulation for lowest and highest channel</li> <li>h. Test the EUT in the lowest channel , the Highest channel</li> <li>i. The radiation measurements are performed in X, Y, Z axis positioning for Transmitting mode,And found the X axis positioning which it is worse case.</li> <li>j. Repeat above procedures until all frequencies measured was complete.</li> </ul> |
|------------------------|--|
| Exploratory Test Mode: | Transmitting with all kind of modulations, data rates.<br>Charge + Transmitting mode.  |
| Final Test Mode:       |  |
| Final Test Wode:       | Pretest the EUT at Charge + Transmitting mode.<br>Through Pre-scan, find the   |
|                        | 1Mbps of rate is the worst case of 802.11B;  |
|                        | 6Mbps of rate is the worst case of 802.11G;  |
|                        | 6.5Mbps of rate is the worst case of 802.11N(HT20)/AC(VHT20)/AX(VHE20);  |
|                        | 13.5Mbps of rate is the worst case of 802.11N(HT40)/ AC(VHT40)/AX(VHE40).  |
|                        | Only the worst case is recorded in the report.   |
| Instruments Used:      | Refer to section 6 for details   |
| Test Results:          | Pass   |
|                        |  |

The detailed test data see: Appendix



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# 5 Measurement Uncertainty (95% confidence levels, k=2)

| Lab A: |                               |                          |
|--------|-------------------------------|--------------------------|
| No.    | Item                          | Measurement Uncertainty  |
| 1      | Total RF power, conducted     | ±0.41dB                  |
| 2      | RF power density, conducted   | ±1.96dB                  |
| 3      | Spurious emissions, conducted | ±0.41dB                  |
| 4      | Radio Frequency               | ±7.10 x 10 <sup>-8</sup> |
| 5      | Duty Cycle                    | ±0.49%                   |
| 6      | Occupied Bandwidth            | ±0.2%                    |

#### Lab B:

| No. | Item                | Measurement Uncertainty   |  |  |
|-----|---------------------|---------------------------|--|--|
| 1   | Conduction Emission | ± 3.0dB (150kHz to 30MHz) |  |  |
|     |                     | ± 4.8dB (Below 1GHz)      |  |  |
| 2   | Radiated Emission   | ± 4.8dB (1GHz to 6GHz)    |  |  |
| 2   |                     | ± 4.5dB (6GHz to 18GHz)   |  |  |
|     |                     | ± 5.02dB (Above 18GHz)    |  |  |



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# 6 Equipment List

|                                    |  | RF conducted |               |                           |                               |
|------------------------------------|--|--------------|---------------|---------------------------|-------------------------------|
| Test Equipment                     | Manufacturer                                   | Model No.    | Inventory No. | Cal. Date<br>(yyyy-mm-dd) | Cal. Due date<br>(yyyy-mm-dd) |
| Signal Analyzer                    | Rohde & Schwarz                                | FSV          | W025-05       | 2021/4/14                 | 2022/4/13                     |
| DC Power Supply                    | DC Power Supply Rohde & Schwarz                |              | W009-08       | 2020/7/15                 | 2021/7/15                     |
| Power Meter                        | Rohde & Schwarz                                | NRVS         | SEM014-02     | 2020/7/14                 | 2021/7/13                     |
| Humidity/ Temperature<br>Indicator | Shanghai<br>Meteorological<br>Industry Factory | HTC-1        | W006-17       | 2021/4/14                 | 2022/4/13                     |

|                                   | CE Test System |             |               |            |                 |  |  |  |  |  |
|-----------------------------------|----------------|-------------|---------------|------------|-----------------|--|--|--|--|--|
| Equipment                         | Manufacturer   | Model No.   | Inventory No. | Cal Date   | Cal Due<br>Date |  |  |  |  |  |
| Shielding Room                    | Brilliant-emc  | N/A         | XAW03-35-01   | 2019-09-11 | 2022-09-10      |  |  |  |  |  |
| Test receiver                     | ROHDE&SCHWARZ  | ESR         | XAW01-08-01   | 2020-09-11 | 2021-09-10      |  |  |  |  |  |
| Artificial network                | ROHDE&SCHWARZ  | ENV216      | XAW01-04-01   | 2020-08-04 | 2021-08-03      |  |  |  |  |  |
| Temperature and<br>humidity meter | MingGao        | TH101B      | XAW01-01-01   | 2020-11-06 | 2021-11-05      |  |  |  |  |  |
| Measurement<br>Software           | Tonscend       | TS+ CE V2.5 | XAW02-05-02   | NCR        | NCR             |  |  |  |  |  |



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|                                       | RSE Test System |                     |               |            |              |  |  |  |  |  |
|---------------------------------------|-----------------|---------------------|---------------|------------|--------------|--|--|--|--|--|
| Equipment                             | Manufacturer    | Model No.           | Inventory No. | Cal Date   | Cal Due Date |  |  |  |  |  |
| Semi-Anechoic<br>Chamber              | Brilliant-emc   | N/A                 | XAW03-35-01   | 2019-09-11 | 2022-09-10   |  |  |  |  |  |
| MXA signal analyzer                   | Keysight        | N9020A              | XAW01-06-01   | 2021-04-01 | 2022-03-31   |  |  |  |  |  |
| Test receiver                         | ROHDE&SCHWARZ   | ESR                 | XAW01-08-01   | 2020-09-11 | 2021-09-10   |  |  |  |  |  |
| Receiving antenna<br>(30MHz-3GHz)     | Schwarzbeck     | VULB 9163           | XAW01-09-01   | 2019-10-13 | 2021-10-12   |  |  |  |  |  |
| Receiving antenna<br>(1GHz~18GHz)     | Schwarzbeck     | BBHA 9120D          | XAW01-09-02   | 2019-10-13 | 2021-10-12   |  |  |  |  |  |
| Receiving antenna<br>(15GHz~40GHz)    | Schwarzbeck     | BBHA 9170           | XAW01-09-03   | 2019-10-13 | 2021-10-12   |  |  |  |  |  |
| Directional antenna rack controller   | Max-Full        | MF-7802BS           | XAW03-03-01   | NCR        | NCR          |  |  |  |  |  |
| High-speed antenna<br>rack controller | Max-Full        | MF-7802             | XAW03-04-01   | NCR        | NCR          |  |  |  |  |  |
| Filter bank                           | Tonscend        | JS0806-F            | XAW03-05-01   | NCR        | NCR          |  |  |  |  |  |
| Filter bank                           | Tonscend        | JS0806s             | XAW03-05-02   | NCR        | NCR          |  |  |  |  |  |
| Amplifier                             | Tonscend        | TAP00903040         | XAW01-41-01   | 2020-10-26 | 2021-10-25   |  |  |  |  |  |
| Amplifier                             | Tonscend        | TAP01018048         | XAW01-41-02   | 2020-10-26 | 2021-10-25   |  |  |  |  |  |
| Amplifier                             | Tonscend        | TAP18040048         | XAW01-41-03   | 2020-10-27 | 2021-10-26   |  |  |  |  |  |
| Amplifier                             | Shanghai Steed  | YX28980930          | XAW01-41-06   | 2020-10-26 | 2021-10-25   |  |  |  |  |  |
| Temperature and<br>humidity meter     | MingGao         | TH101B              | XAW01-01-01   | 2020-11-06 | 2021-11-05   |  |  |  |  |  |
| Measurement Software                  | Tonscend        | TS+ RSE<br>V3.0.0.2 | XAW02-05-01   | NCR        | NCR          |  |  |  |  |  |



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# 7 Photographs - EUT Constructional Details

Refer to Appendix A Setup Photos.



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# Appendix



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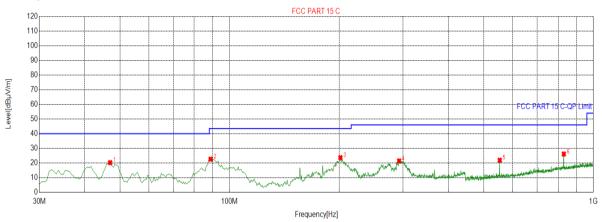


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### **Radiated Spurious Emissions**

#### Radiated emission below 1GHz

#### Charge + Transmitting Test Graph



QP Detector

### Suspected List

| Suspe | ected List     |                   |                |                   | _              |                |              |            |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|------------|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity   |
| 1     | 46.9835        | 20.23             | -21.39         | 40.00             | 19.77          | 252            | 229          | Horizontal |
| 2     | 88.7144        | 22.61             | -24.85         | 43.50             | 20.89          | 174            | 271          | Horizontal |
| 3     | 201.775        | 23.67             | -22.38         | 43.50             | 19.83          | 195            | 218          | Horizontal |
| 4     | 292.516        | 21.42             | -19.46         | 46.00             | 24.58          | 175            | 54           | Horizontal |
| 5     | 553.091        | 21.91             | -13.03         | 46.00             | 24.09          | 162            | 279          | Horizontal |
| 6     | 829.679        | 26.15             | -8.70          | 46.00             | 19.85          | 145            | 286          | Horizontal |
|       | - 4 - 1 1 - 4  |                   |                |                   |                |                |              |            |

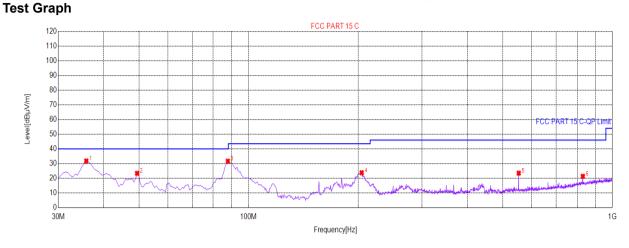
Final Data List



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#### QP Detector

| Sus | spe | ec | ted   | L | .is | st  |   |
|-----|-----|----|-------|---|-----|-----|---|
| 0   |     |    | - 4 - |   |     | • • | 4 |

| Suspe | Suspected List |                   |                |                   |                |                |              |          |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|----------|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity |  |
| 1     | 35.8229        | 31.78             | -23.68         | 40.00             | 8.22           | 252            | 353          | Vertical |  |
| 2     | 49.4097        | 23.37             | -21.37         | 40.00             | 16.63          | 174            | 353          | Vertical |  |
| 3     | 87.7439        | 31.66             | -25.12         | 40.00             | 8.34           | 165            | 76           | Vertical |  |
| 4     | 204.687        | 23.76             | -22.16         | 43.50             | 19.74          | 184            | 222          | Vertical |  |
| 5     | 553.091        | 23.51             | -13.03         | 46.00             | 22.49          | 164            | 46           | Vertical |  |
| 6     | 829.679        | 21.36             | -8.70          | 46.00             | 24.64          | 184            | 7            | Vertical |  |

**Final Data List** 



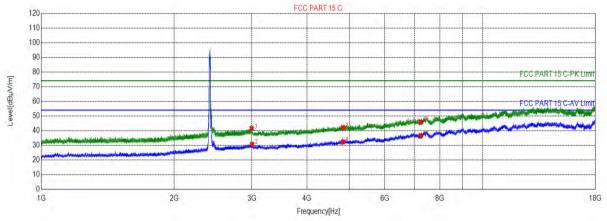
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#### Transmitter emission above 1GHz

#### 802.11B\_Channel 1 MIMO Test Graph



PK Detector
 \* AV Detector

#### Suspected List Suspected List Freq. Level Factor Limit Margin Height Angle NO. Polarity [MHz] [dBµV/m] [dB] [dBµV/m] [dB] [cm] [°] 2996.89 41.49 10.71 32.51 187 1 74.00 159 Horizontal 3003.00 2 30.69 -21.18 54.00 23.31 198 172 Horizontal 4824.00 3 42.16 -15.31 74.00 31.84 165 201 Horizontal 4824.00 4 32.23 -15.31 54.00 21.77 177 289 Horizontal 7236.00 5 36.73 -8.82 54.00 17.27 182 100 Horizontal 7236.00 46.09 -8.82 74.00 194 318 6 27.91 Horizontal

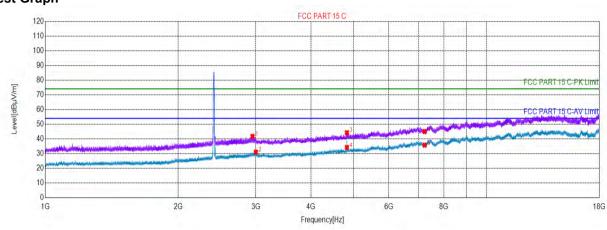
**Final Data List** 



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#### 802.11B \_Channel 1 MIMO Test Graph

PK Detector
 \* AV Detector

#### Suspected List

| Suspe | Suspected List |                   |                |                   |                |                |              |          |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|----------|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity |  |  |
| 1     | 2948.09        | 41.75             | 10.55          | 74.00             | 32.25          | 188            | 45           | Vertical |  |  |
| 2     | 2999.80        | 30.98             | 10.80          | 54.00             | 23.02          | 174            | 7            | Vertical |  |  |
| 3     | 4824.00        | 44.20             | -15.31         | 74.00             | 29.80          | 169            | 79           | Vertical |  |  |
| 4     | 4824.00        | 34.16             | -15.31         | 54.00             | 19.84          | 158            | 51           | Vertical |  |  |
| 5     | 7236.00        | 35.77             | -8.82          | 54.00             | 18.23          | 192            | 51           | Vertical |  |  |
| 6     | 7236.00        | 45.00             | -8.82          | 74.00             | 29.00          | 210            | 299          | Vertical |  |  |

**Final Data List** 



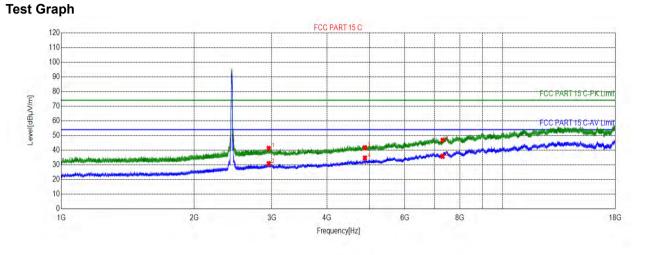
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No.1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, China 518057 t (86–755) 26012053 f (86–755) 2601205



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#### 802.11B \_Channel 6 MIMO



#### PK Detector \* AV Detector

#### Suspected List

| Suspe | Suspected List |                   |                |                   |                |                |              |            |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|------------|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity   |  |  |
| 1     | 2951.69        | 41.23             | 10.56          | 74.00             | 32.77          | 174            | 350          | Horizontal |  |  |
| 2     | 2952.69        | 30.86             | 10.55          | 54.00             | 23.14          | 158            | 262          | Horizontal |  |  |
| 3     | 4874.00        | 41.72             | -15.09         | 74.00             | 32.28          | 169            | 42           | Horizontal |  |  |
| 4     | 4874.00        | 34.65             | -15.09         | 54.00             | 19.35          | 177            | 42           | Horizontal |  |  |
| 5     | 7311.00        | 35.80             | -8.93          | 54.00             | 18.20          | 185            | 127          | Horizontal |  |  |
| 6     | 7311.00        | 46.73             | -8.93          | 74.00             | 27.27          | 150            | 127          | Horizontal |  |  |

**Final Data List** 

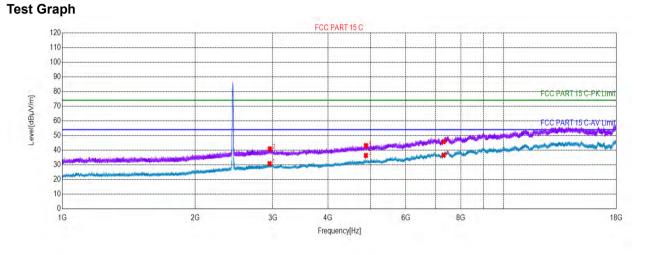


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#### 802.11B \_Channel 6 MIMO



PK Detector
 \* AV Detector

#### Suspected List

| Suspe | Suspected List |                   |                |                   |                |                |              |          |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|----------|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity |  |  |
| 1     | 2949.19        | 30.79             | 10.56          | 54.00             | 23.21          | 215            | 249          | Vertical |  |  |
| 2     | 2952.79        | 40.85             | 10.55          | 74.00             | 33.15          | 198            | 96           | Vertical |  |  |
| 3     | 4874.00        | 36.39             | -15.09         | 54.00             | 17.61          | 201            | 70           | Vertical |  |  |
| 4     | 4874.00        | 43.12             | -15.09         | 74.00             | 30.88          | 157            | 2            | Vertical |  |  |
| 5     | 7311.00        | 45.82             | -8.93          | 74.00             | 28.18          | 168            | 217          | Vertical |  |  |
| 6     | 7311.00        | 36.60             | -8.93          | 54.00             | 17.40          | 194            | 70           | Vertical |  |  |

**Final Data List** 

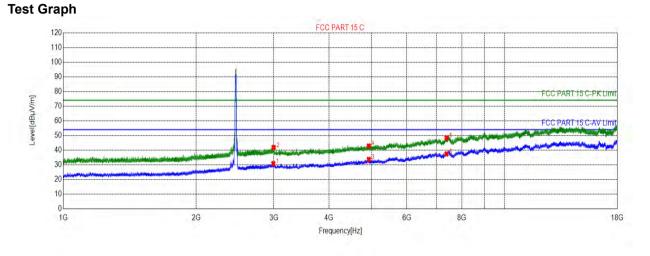


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#### 802.11B \_Channel 11 MIMO



PK Detector
 AV Detector

#### Suspected List

| Suspected List |                |                   |                |                   |                |                |              |            |
|----------------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|------------|
| NO.            | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity   |
| 1              | 2991.59        | 30.86             | 10.54          | 54.00             | 23.14          | 187            | 109          | Horizontal |
| 2              | 2996.99        | 41.81             | 10.71          | 74.00             | 32.19          | 196            | 70           | Horizontal |
| 3              | 4924.00        | 33.71             | -14.74         | 54.00             | 20.29          | 158            | 41           | Horizontal |
| 4              | 4924.00        | 42.87             | -14.74         | 74.00             | 31.13          | 164            | 303          | Horizontal |
| 5              | 7386.00        | 48.38             | -7.78          | 74.00             | 25.62          | 193            | 230          | Horizontal |
| 6              | 7386.00        | 37.41             | -7.78          | 54.00             | 16.59          | 151            | 318          | Horizontal |

**Final Data List** 

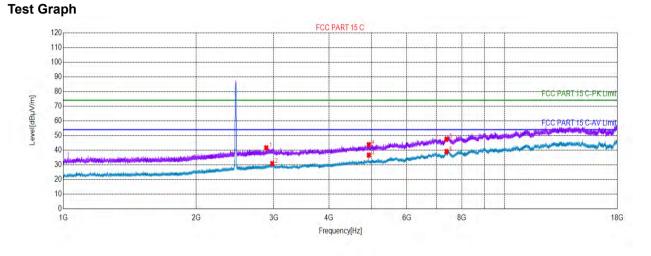


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## 802.11B \_Channel 11 MIMO



PK Detector
 AV Detector

### Suspected List

| Suspe | Suspected List |                   |                |                   |                |                |              |          |  |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|----------|--|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity |  |  |  |
| 1     | 2883.79        | 41.62             | 9.91           | 74.00             | 32.38          | 213            | 235          | Vertical |  |  |  |
| 2     | 2974.69        | 30.90             | 10.43          | 54.00             | 23.10          | 223            | 222          | Vertical |  |  |  |
| 3     | 4924.00        | 36.63             | -14.74         | 54.00             | 17.37          | 236            | 71           | Vertical |  |  |  |
| 4     | 4924.00        | 43.78             | -14.74         | 74.00             | 30.22          | 254            | 71           | Vertical |  |  |  |
| 5     | 7386.00        | 47.60             | -7.78          | 74.00             | 26.40          | 175            | 158          | Vertical |  |  |  |
| 6     | 7386.00        | 39.11             | -7.78          | 54.00             | 14.89          | 198            | 71           | Vertical |  |  |  |

**Final Data List** 

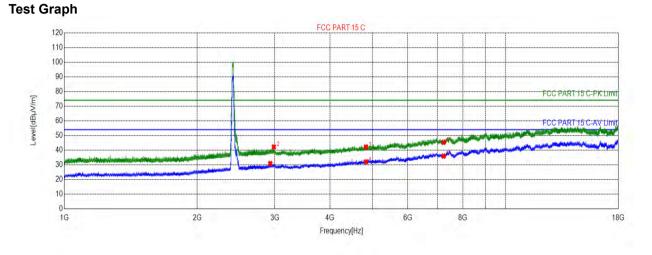


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## 802.11G\_Channel 1 MIMO



### PK Detector \* AV Detector

### Suspected List

| Suspe | Suspected List |                   |                |                   |                |                |              |            |  |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|------------|--|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity   |  |  |  |
| 1     | 2928.89        | 30.89             | 10.53          | 54.00             | 23.11          | 175            | 358          | Horizontal |  |  |  |
| 2     | 2983.99        | 42.20             | 10.52          | 74.00             | 31.80          | 152            | 325          | Horizontal |  |  |  |
| 3     | 4824.00        | 42.18             | -15.31         | 74.00             | 31.82          | 163            | 332          | Horizontal |  |  |  |
| 4     | 4824.00        | 32.02             | -15.31         | 54.00             | 21.98          | 158            | 230          | Horizontal |  |  |  |
| 5     | 7236.00        | 36.00             | -8.82          | 54.00             | 18.00          | 169            | 100          | Horizontal |  |  |  |
| 6     | 7236.00        | 45.42             | -8.82          | 74.00             | 28.58          | 213            | 70           | Horizontal |  |  |  |

**Final Data List** 

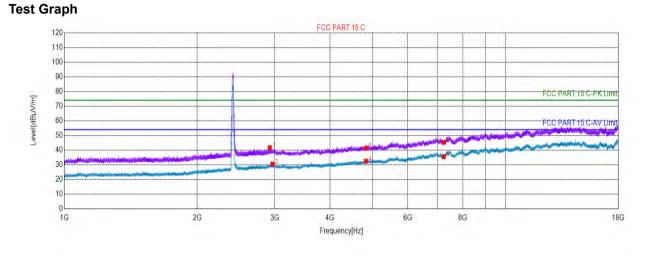


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## 802.11G \_Channel 1 MIMO



### PK Detector AV Detector

#### Suspected List

| Suspe | Suspected List |                   |                |                   |                |                |              |          |  |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|----------|--|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity |  |  |  |
| 1     | 2921.99        | 41.67             | 10.42          | 74.00             | 32.33          | 215            | 33           | Vertical |  |  |  |
| 2     | 2961.79        | 30.43             | 10.48          | 54.00             | 23.57          | 198            | 337          | Vertical |  |  |  |
| 3     | 4824.00        | 41.35             | -15.31         | 74.00             | 32.65          | 175            | 245          | Vertical |  |  |  |
| 4     | 4824.00        | 32.44             | -15.31         | 54.00             | 21.56          | 167            | 304          | Vertical |  |  |  |
| 5     | 7236.00        | 35.55             | -8.82          | 54.00             | 18.45          | 184            | 333          | Vertical |  |  |  |
| 6     | 7236.00        | 45.37             | -8.82          | 74.00             | 28.63          | 152            | 245          | Vertical |  |  |  |

**Final Data List** 

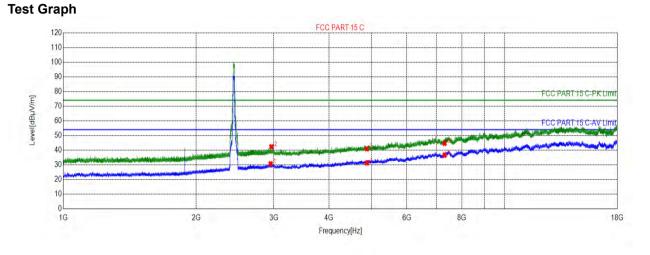


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## 802.11G \_Channel 6 MIMO



### PK Detector \* AV Detector

### Suspected List

| Suspe | Suspected List |                   |                |                   |                |                |              |            |  |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|------------|--|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity   |  |  |  |
| 1     | 2949.19        | 30.75             | 10.56          | 54.00             | 23.25          | 198            | 224          | Horizontal |  |  |  |
| 2     | 2961.49        | 42.33             | 10.49          | 74.00             | 31.67          | 214            | 110          | Horizontal |  |  |  |
| 3     | 4874.00        | 40.87             | -15.09         | 74.00             | 33.13          | 254            | 101          | Horizontal |  |  |  |
| 4     | 4874.00        | 31.27             | -15.09         | 54.00             | 22.73          | 169            | 359          | Horizontal |  |  |  |
| 5     | 7311.00        | 36.56             | -8.93          | 54.00             | 17.44          | 174            | 101          | Horizontal |  |  |  |
| 6     | 7311.00        | 44.62             | -8.93          | 74.00             | 29.38          | 185            | 71           | Horizontal |  |  |  |

**Final Data List** 

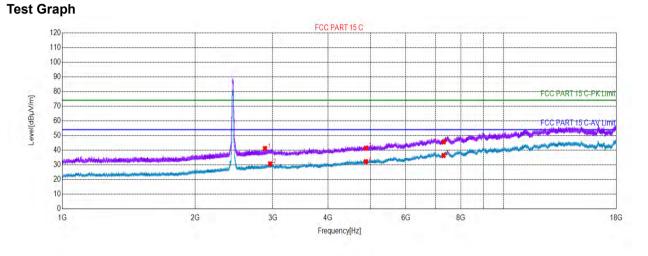


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## 802.11G \_Channel 6 MIMO



### PK Detector \* AV Detector

### Suspected List

| Suspe | Suspected List |                   |                |                   |                |                |              |          |  |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|----------|--|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity |  |  |  |
| 1     | 2879.29        | 41.13             | 9.90           | 74.00             | 32.87          | 178            | 120          | Vertical |  |  |  |
| 2     | 2957.79        | 30.65             | 10.53          | 54.00             | 23.35          | 196            | 358          | Vertical |  |  |  |
| 3     | 4874.00        | 41.31             | -15.09         | 74.00             | 32.69          | 154            | 231          | Vertical |  |  |  |
| 4     | 4874.00        | 32.13             | -15.09         | 54.00             | 21.87          | 182            | 70           | Vertical |  |  |  |
| 5     | 7311.00        | 36.40             | -8.93          | 54.00             | 17.60          | 199            | 318          | Vertical |  |  |  |
| 6     | 7311.00        | 45.64             | -8.93          | 74.00             | 28.36          | 236            | 231          | Vertical |  |  |  |

**Final Data List** 

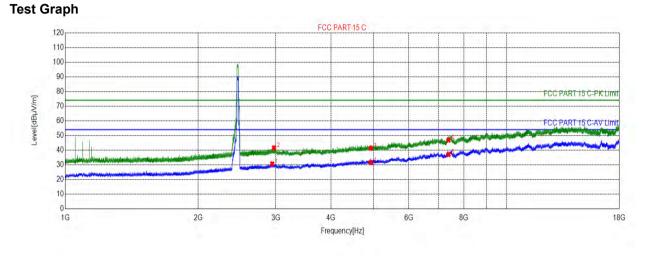


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## 802.11G \_Channel 11 MIMO



PK Detector
 \* AV Detector

### Suspected List

| Suspe | Suspected List |                   |                |                   |                |                |              |            |  |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|------------|--|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity   |  |  |  |
| 1     | 2942.49        | 30.66             | 10.52          | 54.00             | 23.34          | 156            | 239          | Horizontal |  |  |  |
| 2     | 2971.29        | 41.54             | 10.36          | 74.00             | 32.46          | 241            | 350          | Horizontal |  |  |  |
| 3     | 4924.00        | 41.32             | -14.74         | 74.00             | 32.68          | 158            | 12           | Horizontal |  |  |  |
| 4     | 4924.00        | 31.60             | -14.74         | 54.00             | 22.40          | 175            | 199          | Horizontal |  |  |  |
| 5     | 7386.00        | 37.04             | -7.78          | 54.00             | 16.96          | 196            | 214          | Horizontal |  |  |  |
| 6     | 7386.00        | 46.90             | -7.78          | 74.00             | 27.10          | 182            | 108          | Horizontal |  |  |  |

**Final Data List** 

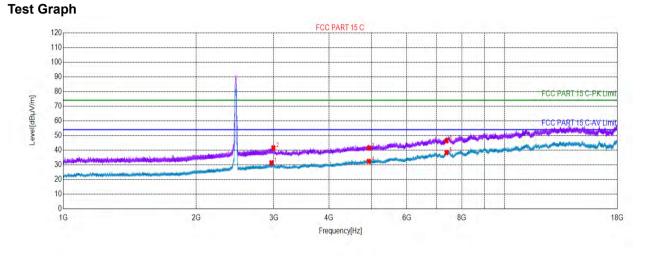


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## 802.11G \_Channel 11 MIMO



### PK Detector \* AV Detector

### Suspected List

| Suspe | Suspected List |                   |                |                   |                |                |              |          |  |  |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|----------|--|--|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity |  |  |  |  |
| 1     | 2962.29        | 31.40             | 10.47          | 54.00             | 22.60          | 187            | 307          | Vertical |  |  |  |  |
| 2     | 2992.19        | 41.56             | 10.56          | 74.00             | 32.44          | 157            | 295          | Vertical |  |  |  |  |
| 3     | 4924.00        | 41.47             | -14.74         | 74.00             | 32.53          | 168            | 248          | Vertical |  |  |  |  |
| 4     | 4924.00        | 32.36             | -14.74         | 54.00             | 21.64          | 159            | 56           | Vertical |  |  |  |  |
| 5     | 7386.00        | 38.33             | -7.78          | 54.00             | 15.67          | 181            | 129          | Vertical |  |  |  |  |
| 6     | 7386.00        | 46.36             | -7.78          | 74.00             | 27.64          | 179            | 333          | Vertical |  |  |  |  |

Final Data List

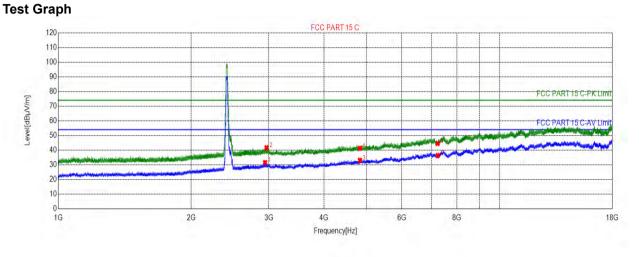


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## 802.11N20\_Channel 1 MIMO



PK Detector
 AV Detector

### Suspected List

| Suspe | Suspected List |                   |                |                   |                |                |              |            |  |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|------------|--|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity   |  |  |  |
| 1     | 2941.49        | 31.58             | 10.51          | 54.00             | 22.42          | 175            | 109          | Horizontal |  |  |  |
| 2     | 2963.49        | 41.62             | 10.45          | 74.00             | 32.38          | 164            | 312          | Horizontal |  |  |  |
| 3     | 4824.00        | 33.12             | -15.31         | 54.00             | 20.88          | 158            | 41           | Horizontal |  |  |  |
| 4     | 4824.00        | 41.25             | -15.31         | 74.00             | 32.75          | 192            | 246          | Horizontal |  |  |  |
| 5     | 7236.00        | 44.55             | -8.82          | 74.00             | 29.45          | 178            | 56           | Horizontal |  |  |  |
| 6     | 7236.00        | 36.39             | -8.82          | 54.00             | 17.61          | 156            | 246          | Horizontal |  |  |  |

**Final Data List** 

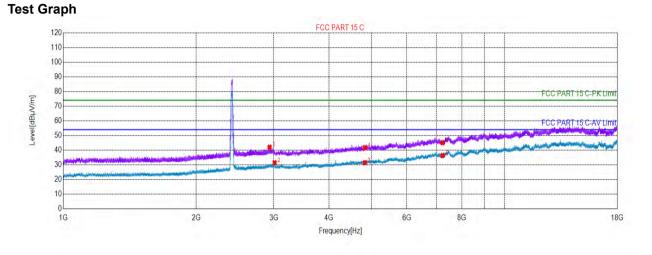


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## 802.11N20\_Channel 1 MIMO



PK Detector
 \* AV Detector

### Suspected List

| Suspe | Suspected List |                   |                |                   |                |                |              |          |  |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|----------|--|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity |  |  |  |
| 1     | 2934.19        | 41.98             | 10.53          | 74.00             | 32.02          | 188            | 300          | Vertical |  |  |  |
| 2     | 3012.00        | 31.44             | -21.16         | 54.00             | 22.56          | 155            | 303          | Vertical |  |  |  |
| 3     | 4824.00        | 31.44             | -15.31         | 54.00             | 22.56          | 165            | 113          | Vertical |  |  |  |
| 4     | 4824.00        | 41.75             | -15.31         | 74.00             | 32.25          | 174            | 56           | Vertical |  |  |  |
| 5     | 7236.00        | 45.05             | -8.82          | 74.00             | 28.95          | 256            | 56           | Vertical |  |  |  |
| 6     | 7236.00        | 36.39             | -8.82          | 54.00             | 17.61          | 198            | 26           | Vertical |  |  |  |

**Final Data List** 



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18G

#### **Test Graph** FCC PART 15 C 120 110 100 90 80 FCC PART 15 C-PK LIM Level[dBµV/m] 70 60 FCC PART 15 C-AV Lim 50 40 30 20 10 0 1G 2G 3G 4G 6G 8G Frequency[Hz]

## 802.11N20\_Channel 6 MIMO



#### Suspected List

| Suspe | Suspected List |                   |                |                   |                |                |              |            |  |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|------------|--|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity   |  |  |  |
| 1     | 2937.49        | 30.77             | 10.52          | 54.00             | 23.23          | 187            | 311          | Horizontal |  |  |  |
| 2     | 2965.29        | 41.37             | 10.42          | 74.00             | 32.63          | 175            | 336          | Horizontal |  |  |  |
| 3     | 4874.00        | 31.58             | -15.09         | 54.00             | 22.42          | 165            | 26           | Horizontal |  |  |  |
| 4     | 4874.00        | 41.68             | -15.09         | 74.00             | 32.32          | 194            | 99           | Horizontal |  |  |  |
| 5     | 7311.00        | 46.45             | -8.93          | 74.00             | 27.55          | 158            | 202          | Horizontal |  |  |  |
| 6     | 7311.00        | 36.34             | -8.93          | 54.00             | 17.66          | 147            | 12           | Horizontal |  |  |  |

**Final Data List** 

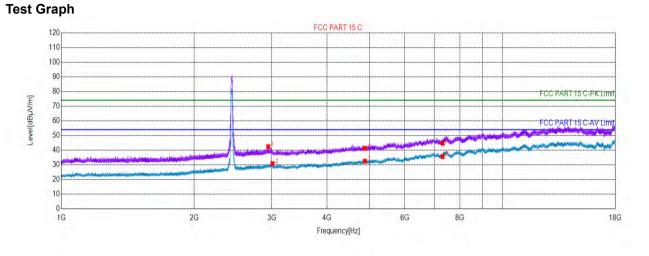


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## 802.11N20\_Channel 6 MIMO



### PK Detector \* AV Detector

### Suspected List

| Suspe | Suspected List |                   |                |                   |                |                |              |          |  |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|----------|--|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity |  |  |  |
| 1     | 2944.29        | 42.36             | 10.53          | 74.00             | 31.64          | 187            | 152          | Vertical |  |  |  |
| 2     | 3010.20        | 30.81             | -21.16         | 54.00             | 23.19          | 175            | 157          | Vertical |  |  |  |
| 3     | 4874.00        | 32.44             | -15.09         | 54.00             | 21.56          | 162            | 85           | Vertical |  |  |  |
| 4     | 4874.00        | 41.28             | -15.09         | 74.00             | 32.72          | 195            | 41           | Vertical |  |  |  |
| 5     | 7311.00        | 44.72             | -8.93          | 74.00             | 29.28          | 169            | 55           | Vertical |  |  |  |
| 6     | 7311.00        | 35.63             | -8.93          | 54.00             | 18.37          | 158            | 142          | Vertical |  |  |  |

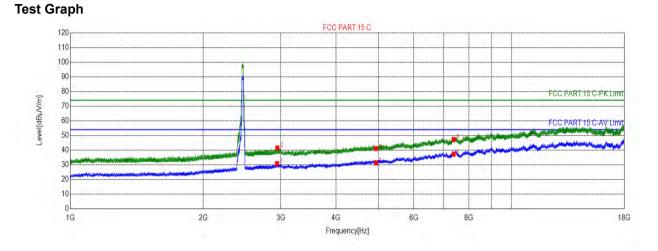
**Final Data List** 



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### 802.11N20\_Channel 11 MIMO

PK Detector
 \* AV Detector

### Suspected List

| Suspe | Suspected List |                   |                |                   |                |                |              |            |  |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|------------|--|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity   |  |  |  |
| 1     | 2941.19        | 30.88             | 10.51          | 54.00             | 23.12          | 178            | 236          | Horizontal |  |  |  |
| 2     | 2944.89        | 41.58             | 10.53          | 74.00             | 32.42          | 195            | 210          | Horizontal |  |  |  |
| 3     | 4924.00        | 31.29             | -14.74         | 54.00             | 22.71          | 159            | 70           | Horizontal |  |  |  |
| 4     | 4924.00        | 41.03             | -14.74         | 74.00             | 32.97          | 167            | 246          | Horizontal |  |  |  |
| 5     | 7386.00        | 47.28             | -7.78          | 74.00             | 26.72          | 188            | 332          | Horizontal |  |  |  |
| 6     | 7386.00        | 37.16             | -7.78          | 54.00             | 16.84          | 154            | 275          | Horizontal |  |  |  |

**Final Data List** 

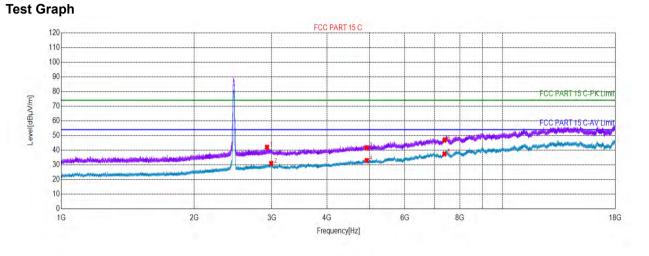


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## 802.11N20\_Channel 11 MIMO



### PK Detector \* AV Detector

#### Suspected List

| Suspe | Suspected List |                   |                |                   |                |                |              |          |  |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|----------|--|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity |  |  |  |
| 1     | 2924.79        | 41.97             | 10.46          | 74.00             | 32.03          | 178            | 135          | Vertical |  |  |  |
| 2     | 2989.89        | 30.98             | 10.49          | 54.00             | 23.02          | 214            | 45           | Vertical |  |  |  |
| 3     | 4924.00        | 41.58             | -14.74         | 74.00             | 32.42          | 156            | 188          | Vertical |  |  |  |
| 4     | 4924.00        | 32.98             | -14.74         | 54.00             | 21.02          | 195            | 2            | Vertical |  |  |  |
| 5     | 7386.00        | 37.46             | -7.78          | 54.00             | 16.54          | 177            | 2            | Vertical |  |  |  |
| 6     | 7386.00        | 46.83             | -7.78          | 74.00             | 27.17          | 155            | 203          | Vertical |  |  |  |

**Final Data List** 

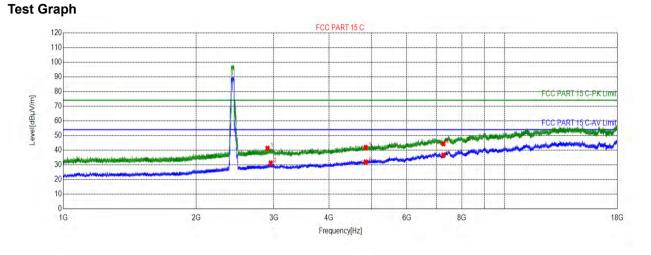


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## 802.11N40\_Channel 3 MIMO



### PK Detector \* AV Detector

### Suspected List

| Suspe | Suspected List |                   |                |                   |                |                |              |            |  |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|------------|--|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity   |  |  |  |
| 1     | 2902.49        | 41.26             | 10.18          | 74.00             | 32.74          | 215            | 45           | Horizontal |  |  |  |
| 2     | 2951.79        | 31.23             | 10.56          | 54.00             | 22.77          | 208            | 7            | Horizontal |  |  |  |
| 3     | 4844.00        | 41.79             | -15.21         | 74.00             | 32.21          | 150            | 172          | Horizontal |  |  |  |
| 4     | 4844.00        | 31.93             | -15.21         | 54.00             | 22.07          | 178            | 114          | Horizontal |  |  |  |
| 5     | 7266.00        | 36.59             | -9.04          | 54.00             | 17.41          | 195            | 303          | Horizontal |  |  |  |
| 6     | 7266.00        | 44.35             | -9.04          | 74.00             | 29.65          | 166            | 215          | Horizontal |  |  |  |

**Final Data List** 



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FCC PART 15 C-PK LIM

FCC PART 15 C-AV Limi

18G

#### FCC PART 15 C 120 110 100 90 80 Level[dBµV/m] 70 60 50 40 30

3G

## 802.11N40\_Channel 3 MIMO





6G

8G

PK Detector \* AV Detector

2G

### Suspected List

| Suspe | Suspected List |                   |                |                   |                |                |              |          |  |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|----------|--|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity |  |  |  |
| 1     | 2989.69        | 40.76             | 10.49          | 74.00             | 33.24          | 150            | 110          | Vertical |  |  |  |
| 2     | 2998.29        | 30.63             | 10.76          | 54.00             | 23.37          | 177            | 21           | Vertical |  |  |  |
| 3     | 4844.00        | 32.56             | -15.21         | 54.00             | 21.44          | 148            | 12           | Vertical |  |  |  |
| 4     | 4844.00        | 41.81             | -15.21         | 74.00             | 32.19          | 198            | 186          | Vertical |  |  |  |
| 5     | 7266.00        | 44.74             | -9.04          | 74.00             | 29.26          | 156            | 260          | Vertical |  |  |  |
| 6     | 7266.00        | 35.35             | -9.04          | 54.00             | 18.65          | 159            | 158          | Vertical |  |  |  |

Final Data List



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18G

#### **Test Graph** FCC PART 15 C 120 110 100 90 80 FCC PART 15 C-PK LIM Level[dBµV/m] 70 60 FCC PART 15 C-AV Lim 50 40 30 20 10 0 1G 2G 3G 4G 6G 8G Frequency[Hz]

## 802.11N40\_Channel 6 MIMO



### Suspected List

| Suspe | Suspected List |                   |                |                   |                |                |              |            |  |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|------------|--|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity   |  |  |  |
| 1     | 2938.79        | 30.74             | 10.51          | 54.00             | 23.26          | 178            | 72           | Horizontal |  |  |  |
| 2     | 2988.29        | 41.76             | 10.50          | 74.00             | 32.24          | 195            | 84           | Horizontal |  |  |  |
| 3     | 4874.00        | 40.78             | -15.09         | 74.00             | 33.22          | 165            | 115          | Horizontal |  |  |  |
| 4     | 4874.00        | 32.19             | -15.09         | 54.00             | 21.81          | 174            | 202          | Horizontal |  |  |  |
| 5     | 7311.00        | 35.72             | -8.93          | 54.00             | 18.28          | 159            | 320          | Horizontal |  |  |  |
| 6     | 7311.00        | 45.62             | -8.93          | 74.00             | 28.38          | 188            | 85           | Horizontal |  |  |  |

**Final Data List** 



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18G

#### **Test Graph** FCC PART 15 C 120 110 100 90 80 FCC PART 15 C-PK LIM Level[dBµV/m] 70 60 FCC PART 15 C-AV Lim 50 40 30 20 10 0 1G 2G 3G 4G 6G 8G Frequency[Hz]

## 802.11N40\_Channel 6 MIMO



### Suspected List

| Suspe | Suspected List |                   |                |                   |                |                |              |          |  |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|----------|--|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity |  |  |  |
| 1     | 2925.39        | 41.27             | 10.47          | 74.00             | 32.73          | 215            | 358          | Vertical |  |  |  |
| 2     | 2932.19        | 30.94             | 10.54          | 54.00             | 23.06          | 224            | 160          | Vertical |  |  |  |
| 3     | 4874.00        | 42.17             | -15.09         | 74.00             | 31.83          | 236            | 268          | Vertical |  |  |  |
| 4     | 4874.00        | 31.49             | -15.09         | 54.00             | 22.51          | 208            | 33           | Vertical |  |  |  |
| 5     | 7311.00        | 36.57             | -8.93          | 54.00             | 17.43          | 214            | 166          | Vertical |  |  |  |
| 6     | 7311.00        | 45.41             | -8.93          | 74.00             | 28.59          | 178            | 284          | Vertical |  |  |  |

**Final Data List** 

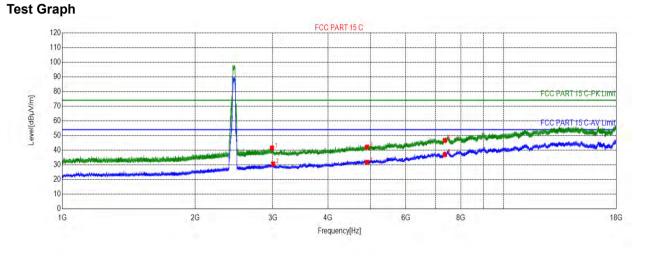


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## 802.11N40\_Channel 9 MIMO



### PK Detector \* AV Detector

### Suspected List

| Suspe | Suspected List |                   |                |                   |                |                |              |            |  |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|------------|--|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity   |  |  |  |
| 1     | 2986.09        | 41.51             | 10.51          | 74.00             | 32.49          | 205            | 196          | Horizontal |  |  |  |
| 2     | 3004.20        | 30.62             | -21.18         | 54.00             | 23.38          | 218            | 41           | Horizontal |  |  |  |
| 3     | 4904.00        | 42.14             | -14.95         | 74.00             | 31.86          | 224            | 252          | Horizontal |  |  |  |
| 4     | 4904.00        | 31.70             | -14.95         | 54.00             | 22.30          | 275            | 326          | Horizontal |  |  |  |
| 5     | 7356.00        | 36.88             | -7.68          | 54.00             | 17.12          | 268            | 237          | Horizontal |  |  |  |
| 6     | 7356.00        | 46.59             | -7.68          | 74.00             | 27.41          | 231            | 77           | Horizontal |  |  |  |

**Final Data List** 

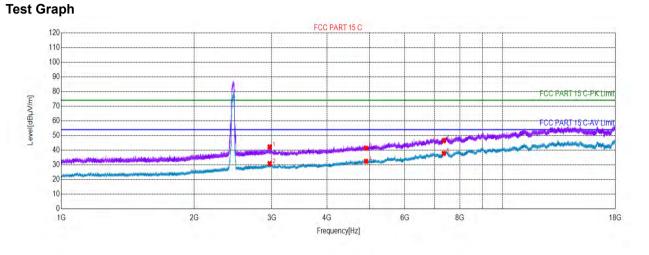


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## 802.11N40\_Channel 9 MIMO



PK Detector
 \* AV Detector

### Suspected List

| Suspe | Suspected List |                   |                |                   |                |                |              |          |  |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|----------|--|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity |  |  |  |
| 1     | 2964.59        | 42.18             | 10.43          | 74.00             | 31.82          | 178            | 186          | Vertical |  |  |  |
| 2     | 2965.39        | 30.85             | 10.41          | 54.00             | 23.15          | 198            | 204          | Vertical |  |  |  |
| 3     | 4904.00        | 41.36             | -14.95         | 74.00             | 32.64          | 156            | 230          | Vertical |  |  |  |
| 4     | 4904.00        | 32.40             | -14.95         | 54.00             | 21.60          | 167            | 143          | Vertical |  |  |  |
| 5     | 7356.00        | 37.80             | -7.68          | 54.00             | 16.20          | 177            | 186          | Vertical |  |  |  |
| 6     | 7356.00        | 46.40             | -7.68          | 74.00             | 27.60          | 169            | 2            | Vertical |  |  |  |

**Final Data List** 

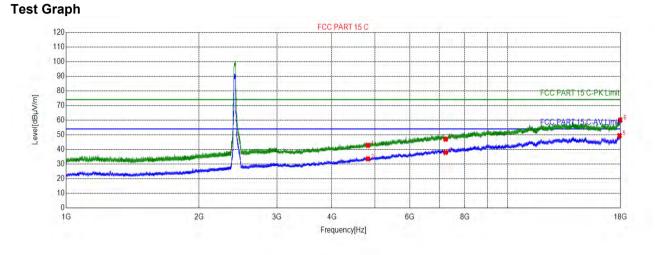


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### 802.11AC20\_Channel 1 MIMO



\* PK Detector \* AV Detector

#### Suspected List

| Susp | Suspected List |                   |                |                   |                |                |              |            |  |  |  |
|------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|------------|--|--|--|
| NO.  | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity   |  |  |  |
| 1    | 4824.00        | 42.81             | -15.31         | 74.00             | 31.19          | 184            | 99           | Horizontal |  |  |  |
| 2    | 4824.00        | 33.53             | -15.31         | 54.00             | 20.47          | 204            | 143          | Horizontal |  |  |  |
| 3    | 7236.00        | 46.99             | -8.82          | 74.00             | 27.01          | 189            | 56           | Horizontal |  |  |  |
| 4    | 7236.00        | 37.91             | -8.82          | 54.00             | 16.09          | 146            | 12           | Horizontal |  |  |  |
| 5    | 17927.3        | 49.42             | 2.35           | 54.00             | 4.58           | 204            | 301          | Horizontal |  |  |  |
| 6    | 17992.1        | 60.06             | 1.54           | 74.00             | 13.94          | 232            | 186          | Horizontal |  |  |  |

**Final Data List** 

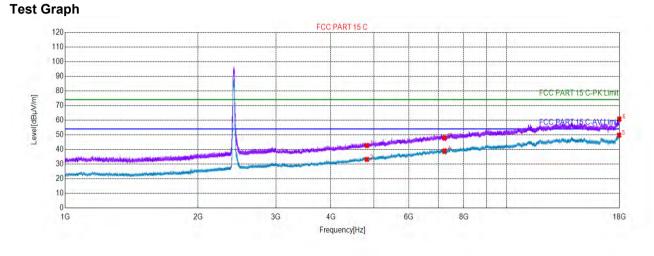


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### 802.11AC20\_Channel 1 MIMO



\* PK Detector \* AV Detector

#### Suspected List

| Suspe | Suspected List |                   |                |                   |                |                |              |          |  |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|----------|--|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity |  |  |  |
| 1     | 4824.00        | 42.62             | -15.31         | 74.00             | 31.38          | 236            | 172          | Vertical |  |  |  |
| 2     | 4824.00        | 33.17             | -15.31         | 54.00             | 20.83          | 325            | 56           | Vertical |  |  |  |
| 3     | 7236.00        | 47.85             | -8.82          | 74.00             | 26.15          | 248            | 99           | Vertical |  |  |  |
| 4     | 7236.00        | 39.02             | -8.82          | 54.00             | 14.98          | 255            | 114          | Vertical |  |  |  |
| 5     | 17979.5        | 49.77             | 1.81           | 54.00             | 4.23           | 296            | 272          | Vertical |  |  |  |
| 6     | 17998.8        | 60.70             | 1.41           | 74.00             | 13.30          | 301            | 12           | Vertical |  |  |  |

**Final Data List** 

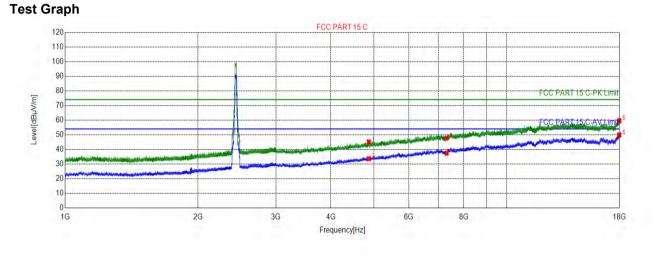


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### 802.11AC20\_Channel 6 MIMO



\* PK Detector \* AV Detector

#### Suspected List

| Susp | Suspected List |                   |                |                   |                |                |              |            |  |  |  |
|------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|------------|--|--|--|
| NO.  | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity   |  |  |  |
| 1    | 4874.00        | 45.15             | -15.09         | 74.00             | 28.85          | 156            | 230          | Horizontal |  |  |  |
| 2    | 4874.00        | 33.64             | -15.09         | 54.00             | 20.36          | 260            | 345          | Horizontal |  |  |  |
| 3    | 7311.00        | 47.74             | -8.93          | 74.00             | 26.26          | 187            | 143          | Horizontal |  |  |  |
| 4    | 7311.00        | 37.46             | -8.93          | 54.00             | 16.54          | 199            | 13           | Horizontal |  |  |  |
| 5    | 17996.9        | 59.55             | 1.44           | 74.00             | 14.45          | 204            | 84           | Horizontal |  |  |  |
| 6    | 17998.8        | 49.86             | 1.41           | 54.00             | 4.14           | 231            | 314          | Horizontal |  |  |  |

**Final Data List** 

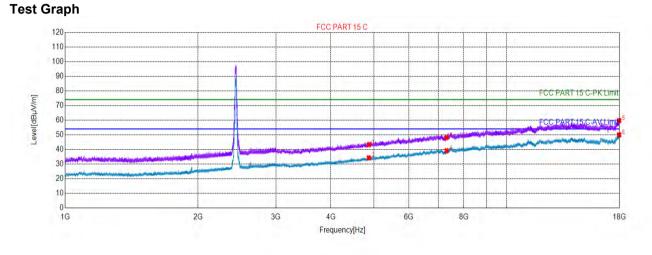


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### 802.11AC20\_Channel 6 MIMO



\* PK Detector \* AV Detector

#### Suspected List

| Susp | Suspected List |                   |                |                   |                |                |              |          |  |  |  |
|------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|----------|--|--|--|
| NO.  | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity |  |  |  |
| 1    | 4874.00        | 43.22             | -15.09         | 74.00             | 30.78          | 236            | 40           | Vertical |  |  |  |
| 2    | 4874.00        | 34.21             | -15.09         | 54.00             | 19.79          | 287            | 28           | Vertical |  |  |  |
| 3    | 7311.00        | 48.15             | -8.93          | 74.00             | 25.85          | 321            | 147          | Vertical |  |  |  |
| 4    | 7311.00        | 39.08             | -8.93          | 54.00             | 14.92          | 241            | 186          | Vertical |  |  |  |
| 5    | 17983.7        | 59.68             | 1.72           | 74.00             | 14.32          | 204            | 104          | Vertical |  |  |  |
| 6    | 17984.3        | 49.95             | 1.71           | 54.00             | 4.05           | 265            | 288          | Vertical |  |  |  |

**Final Data List** 

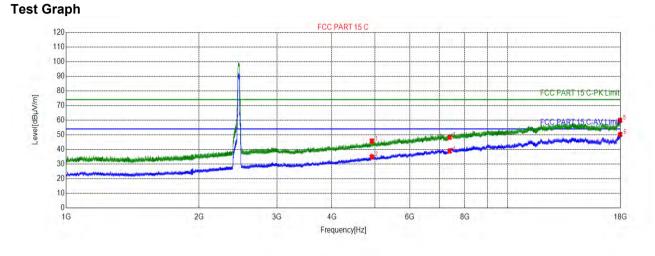


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### 802.11AC20\_Channel 11 MIMO



\* PK Detector \* AV Detector

#### Suspected List

| Susp | Suspected List |                   |                |                   |                |                |              |            |  |  |  |
|------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|------------|--|--|--|
| NO.  | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity   |  |  |  |
| 1    | 4924.00        | 45.78             | -14.74         | 74.00             | 28.22          | 156            | 88           | Horizontal |  |  |  |
| 2    | 4924.00        | 34.93             | -14.74         | 54.00             | 19.07          | 235            | 221          | Horizontal |  |  |  |
| 3    | 7386.00        | 48.21             | -7.78          | 74.00             | 25.79          | 187            | 101          | Horizontal |  |  |  |
| 4    | 7386.00        | 38.86             | -7.78          | 54.00             | 15.14          | 102            | 2            | Horizontal |  |  |  |
| 5    | 17977.1        | 59.93             | 1.86           | 74.00             | 14.07          | 122            | 236          | Horizontal |  |  |  |
| 6    | 17989.1        | 50.20             | 1.61           | 54.00             | 3.80           | 134            | 347          | Horizontal |  |  |  |

**Final Data List** 

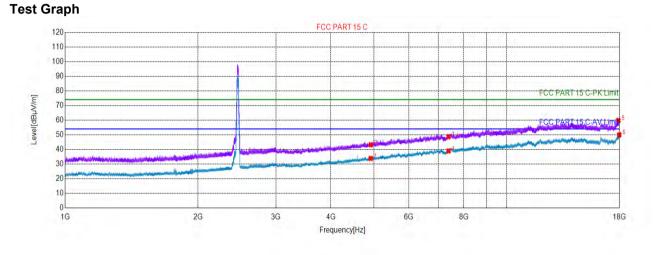


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### 802.11AC20\_Channel 11 MIMO



\* PK Detector \* AV Detector

#### Suspected List

| Suspe | Suspected List |                   |                |                   |                |                |              |          |  |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|----------|--|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity |  |  |  |
| 1     | 4924.00        | 33.84             | -14.74         | 54.00             | 20.16          | 158            | 307          | Vertical |  |  |  |
| 2     | 4924.00        | 43.10             | -14.74         | 74.00             | 30.90          | 325            | 56           | Vertical |  |  |  |
| 3     | 7386.00        | 48.66             | -7.78          | 74.00             | 25.34          | 256            | 56           | Vertical |  |  |  |
| 4     | 7386.00        | 38.93             | -7.78          | 54.00             | 15.07          | 321            | 332          | Vertical |  |  |  |
| 5     | 17915.3        | 59.82             | 2.31           | 74.00             | 14.18          | 321            | 56           | Vertical |  |  |  |
| 6     | 17996.9        | 49.96             | 1.44           | 54.00             | 4.04           | 125            | 190          | Vertical |  |  |  |

**Final Data List** 

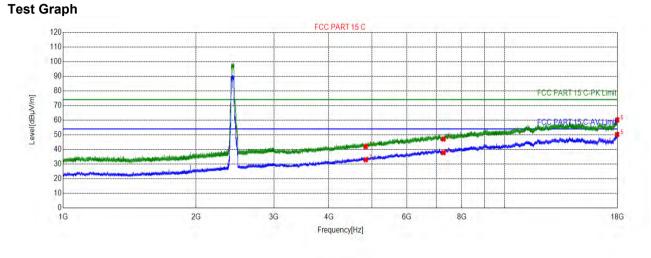


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### 802.11AC40\_Channel 3 MIMO



\* PK Detector \* AV Detector

#### Suspected List

| Susp | Suspected List |                   |                |                   |                |                |              |            |  |  |  |
|------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|------------|--|--|--|
| NO.  | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity   |  |  |  |
| 1    | 4844.00        | 41.86             | -15.21         | 74.00             | 32.14          | 204            | 13           | Horizontal |  |  |  |
| 2    | 4844.00        | 32.93             | -15.21         | 54.00             | 21.07          | 189            | 156          | Horizontal |  |  |  |
| 3    | 7266.00        | 47.10             | -9.04          | 74.00             | 26.90          | 146            | 85           | Horizontal |  |  |  |
| 4    | 7266.00        | 37.78             | -9.04          | 54.00             | 16.22          | 177            | 343          | Horizontal |  |  |  |
| 5    | 17986.7        | 50.17             | 1.66           | 54.00             | 3.83           | 165            | 125          | Horizontal |  |  |  |
| 6    | 17993.9        | 60.15             | 1.51           | 74.00             | 13.85          | 125            | 185          | Horizontal |  |  |  |

**Final Data List** 

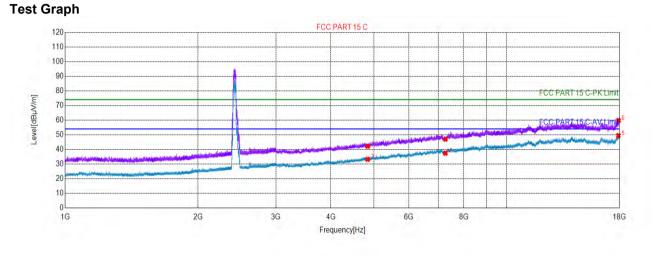


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### 802.11AC40\_Channel 3 MIMO



\* PK Detector \* AV Detector

#### Suspected List

| Suspe | Suspected List |                   |                |                   |                |                |              |          |  |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|----------|--|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity |  |  |  |
| 1     | 4844.00        | 42.19             | -15.21         | 74.00             | 31.81          | 266            | 56           | Vertical |  |  |  |
| 2     | 4844.00        | 33.22             | -15.21         | 54.00             | 20.78          | 288            | 84           | Vertical |  |  |  |
| 3     | 7266.00        | 47.03             | -9.04          | 74.00             | 26.97          | 321            | 117          | Vertical |  |  |  |
| 4     | 7266.00        | 37.45             | -9.04          | 54.00             | 16.55          | 256            | 129          | Vertical |  |  |  |
| 5     | 17913.5        | 49.44             | 2.31           | 54.00             | 4.56           | 263            | 56           | Vertical |  |  |  |
| 6     | 17933.3        | 59.79             | 2.37           | 74.00             | 14.21          | 211            | 174          | Vertical |  |  |  |

**Final Data List** 

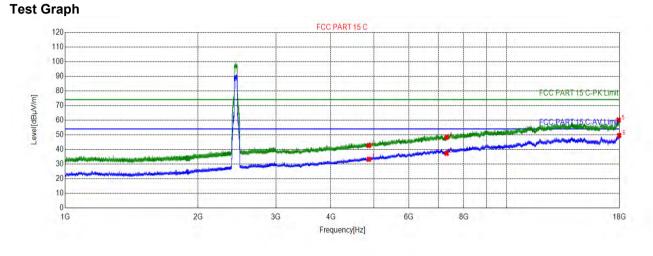


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### 802.11AC40\_Channel 6 MIMO



\* PK Detector \* AV Detector

#### Suspected List

| Suspe | Suspected List |                   |                |                   |                |                |              |            |  |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|------------|--|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity   |  |  |  |
| 1     | 4874.00        | 33.28             | -15.09         | 54.00             | 20.72          | 147            | 224          | Horizontal |  |  |  |
| 2     | 4874.00        | 42.65             | -15.09         | 74.00             | 31.35          | 236            | 239          | Horizontal |  |  |  |
| 5     | 17936.3        | 60.08             | 2.38           | 74.00             | 13.92          | 254            | 42           | Horizontal |  |  |  |
| 4     | 7311.00        | 48.31             | -8.93          | 74.00             | 25.69          | 188            | 86           | Horizontal |  |  |  |
| 3     | 7311.00        | 37.33             | -8.93          | 54.00             | 16.67          | 198            | 218          | Horizontal |  |  |  |
| 6     | 17990.3        | 49.53             | 1.58           | 54.00             | 4.47           | 125            | 44           | Horizontal |  |  |  |

**Final Data List** 

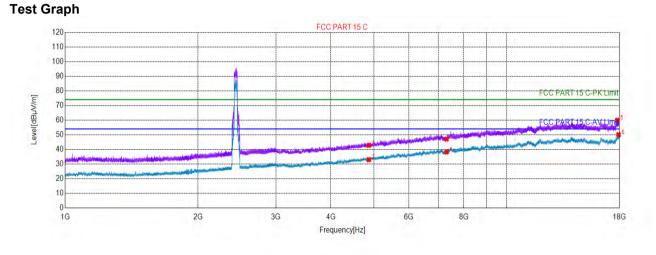


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### 802.11AC40\_Channel 6 MIMO



\* PK Detector \* AV Detector

#### Suspected List

| Suspe | Suspected List |                   |                |                   |                |                |              |          |  |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|----------|--|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity |  |  |  |
| 1     | 4874.00        | 42.81             | -15.09         | 74.00             | 31.19          | 287            | 2            | Vertical |  |  |  |
| 2     | 4874.00        | 32.98             | -15.09         | 54.00             | 21.02          | 154            | 147          | Vertical |  |  |  |
| 3     | 7311.00        | 47.04             | -8.93          | 74.00             | 26.96          | 253            | 288          | Vertical |  |  |  |
| 4     | 7311.00        | 38.26             | -8.93          | 54.00             | 15.74          | 324            | 114          | Vertical |  |  |  |
| 5     | 17807.3        | 59.90             | 1.07           | 74.00             | 14.10          | 185            | 24           | Vertical |  |  |  |
| 6     | 17931.5        | 50.10             | 2.37           | 54.00             | 3.90           | 200            | 331          | Vertical |  |  |  |

**Final Data List** 

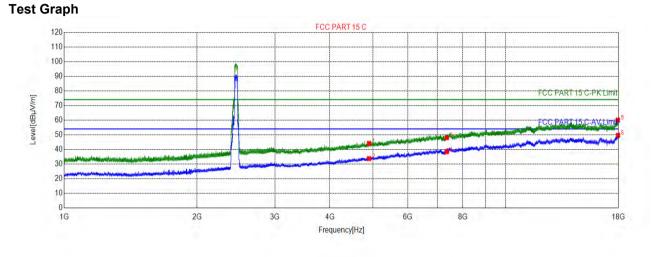


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### 802.11AC40\_Channel 9 MIMO



\* PK Detector \* AV Detector

#### Suspected List

| Suspe | Suspected List |                   |                |                   |                |                |              |            |  |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|------------|--|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity   |  |  |  |
| 1     | 4904.00        | 44.12             | -14.95         | 74.00             | 29.88          | 189            | 192          | Horizontal |  |  |  |
| 2     | 4904.00        | 33.70             | -14.95         | 54.00             | 20.30          | 230            | 12           | Horizontal |  |  |  |
| 3     | 7356.00        | 47.94             | -7.68          | 74.00             | 26.06          | 241            | 287          | Horizontal |  |  |  |
| 4     | 7356.00        | 38.43             | -7.68          | 54.00             | 15.57          | 188            | 2            | Horizontal |  |  |  |
| 5     | 17951.9        | 59.99             | 2.38           | 74.00             | 14.01          | 164            | 56           | Horizontal |  |  |  |
| 6     | 17974.7        | 49.61             | 1.91           | 54.00             | 4.39           | 155            | 12           | Horizontal |  |  |  |

**Final Data List** 

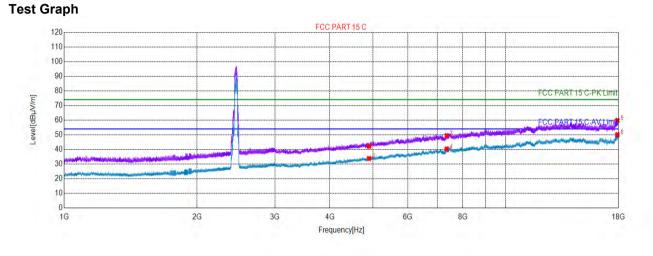


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### 802.11AC40\_Channel 9 MIMO



\* PK Detector \* AV Detector

#### Suspected List

| Suspe | Suspected List |                   |                |                   |                |                |              |          |  |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|----------|--|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity |  |  |  |
| 1     | 4904.00        | 42.06             | -14.95         | 74.00             | 31.94          | 236            | 291          | Vertical |  |  |  |
| 2     | 4904.00        | 33.81             | -14.95         | 54.00             | 20.19          | 254            | 234          | Vertical |  |  |  |
| 3     | 7356.00        | 49.40             | -7.68          | 74.00             | 24.60          | 213            | 172          | Vertical |  |  |  |
| 4     | 7356.00        | 40.29             | -7.68          | 54.00             | 13.71          | 325            | 2            | Vertical |  |  |  |
| 5     | 17912.9        | 59.75             | 2.31           | 74.00             | 14.25          | 288            | 350          | Vertical |  |  |  |
| 6     | 17912.9        | 50.02             | 2.31           | 54.00             | 3.98           | 246            | 11           | Vertical |  |  |  |

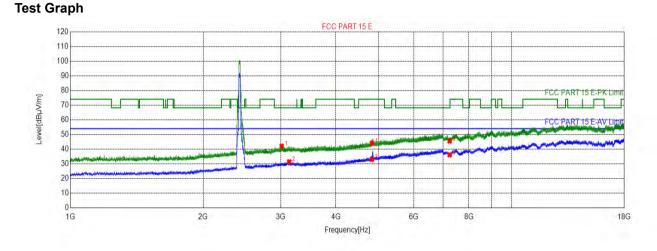
**Final Data List** 



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### 802.11AX20\_Channel 1 MIMO

+ PK Delector + RMS Detector

### Suspected List

| Suspe | Suspected List |                   |                |                   |                |                |              |            |  |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|------------|--|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity   |  |  |  |
| 1     | 3013.70        | 42.10             | 10.74          | 68.20             | 26.10          | 187            | 53           | Horizontal |  |  |  |
| 2     | 3133.40        | 31.36             | 11.08          | 54.00             | 22.64          | 192            | 30           | Horizontal |  |  |  |
| 3     | 4824.00        | 33.00             | 15.83          | 54.00             | 21.00          | 164            | 228          | Horizontal |  |  |  |
| 4     | 4824.00        | 44.03             | 15.83          | 74.00             | 29.97          | 175            | 205          | Horizontal |  |  |  |
| 5     | 7236.00        | 45.50             | -8.59          | 68.20             | 22.70          | 189            | 268          | Horizontal |  |  |  |
| 6     | 7236.00        | 36.15             | -8.59          | 54.00             | 17.85          | 199            | 222          | Horizontal |  |  |  |

**Final Data List** 



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#### FCC PART 15 E 120 110 100 90 80 CC PART 15 F-PKT Level[dBµV/m] Л hΠ 70 -----T 1.1..... 60 CC PART 15 E-AV 50 40 30 20 10 0 1G 2G 3G 4G 6G 8G 18G Frequency[Hz]

## 802.11AX20\_Channel 1 MIMO



### Suspected List

**Test Graph** 

| Suspe | Suspected List |                   |                |                   |                |                |              |          |  |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|----------|--|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity |  |  |  |
| 1     | 3090.50        | 31.24             | 10.84          | 54.00             | 22.76          | 178            | 178          | Vertical |  |  |  |
| 2     | 3136.10        | 42.00             | 10.95          | 68.20             | 26.20          | 196            | 253          | Vertical |  |  |  |
| 3     | 4824.00        | 43.19             | 15.83          | 74.00             | 30.81          | 156            | 291          | Vertical |  |  |  |
| 4     | 4824.00        | 32.41             | 15.83          | 54.00             | 21.59          | 171            | 32           | Vertical |  |  |  |
| 5     | 7236.00        | 45.73             | -8.59          | 68.20             | 22.47          | 152            | 199          | Vertical |  |  |  |
| 6     | 7236.00        | 36.36             | -8.59          | 54.00             | 17.64          | 194            | 85           | Vertical |  |  |  |

**Final Data List** 



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#### FCC PART 15 C 120 110 100 90 80 FCC PART 15 C-PK LI Level[dBµV/m] 70 60 FCC PART 15 50 40 di biba 30 20 10 0 1G 2G 3G 4G 6G 8G 18G Frequency[Hz]

## 802.11AX20\_Channel 6 MIMO

★ PK Detector ★ AV Detector

### Suspected List

**Test Graph** 

| Suspe | Suspected List |                   |                |                   |                |                |              |            |  |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|------------|--|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity   |  |  |  |
| 1     | 2999.60        | 41.82             | 10.80          | 74.00             | 32.18          | 254            | 349          | Horizontal |  |  |  |
| 2     | 3125.40        | 30.97             | -20.93         | 54.00             | 23.03          | 158            | 83           | Horizontal |  |  |  |
| 3     | 4874.00        | 33.43             | -15.09         | 54.00             | 20.57          | 169            | 26           | Horizontal |  |  |  |
| 4     | 4874.00        | 42.57             | -15.09         | 74.00             | 31.43          | 265            | 170          | Horizontal |  |  |  |
| 5     | 7311.00        | 46.40             | -8.93          | 74.00             | 27.60          | 247            | 356          | Horizontal |  |  |  |
| 6     | 7311.00        | 37.05             | -8.93          | 54.00             | 16.95          | 231            | 170          | Horizontal |  |  |  |

**Final Data List** 



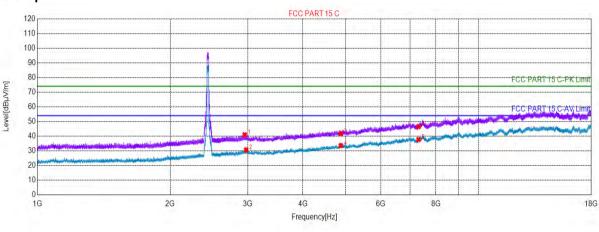
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### **Test Graph** FCC PART 15 C 120 110 100 90 80

### 802.11AX20\_Channel 6 MIMO



#### + PK Detector # AV Detector

### Suspected List

| Suspe | Suspected List |                   |                |                   |                |                |              |          |  |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|----------|--|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity |  |  |  |
| 1     | 2950.59        | 40.94             | 10.56          | 74.00             | 33.06          | 214            | 275          | Vertical |  |  |  |
| 2     | 2972.39        | 30.65             | 10.38          | 54.00             | 23.35          | 256            | 173          | Vertical |  |  |  |
| 3     | 4874.00        | 41.70             | -15.09         | 74.00             | 32.30          | 239            | 200          | Vertical |  |  |  |
| 4     | 4874.00        | 33.59             | -15.09         | 54.00             | 20.41          | 178            | 70           | Vertical |  |  |  |
| 5     | 7311.00        | 37.75             | -8.93          | 54.00             | 16.25          | 195            | 26           | Vertical |  |  |  |
| 6     | 7311.00        | 46.53             | -8.93          | 74.00             | 27.47          | 165            | 40           | Vertical |  |  |  |

Final Data List



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18G

#### **Test Graph** FCC PART 15 C 120 110 100 90 80 FCC PART 15 C-PK LIN Level[dBµV/m] 70 60 FCC PART 15 C AVTI 50 40 30 20 10 0 1G 2G 3G 4G 6G 8G Frequency[Hz]

## 802.11AX20\_Channel 11 MIMO



### Suspected List

| Suspe | Suspected List |                   |                |                   |                |                |              |            |  |  |  |
|-------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|------------|--|--|--|
| NO.   | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity   |  |  |  |
| 1     | 2943.99        | 41.45             | 10.53          | 74.00             | 32.55          | 241            | 137          | Horizontal |  |  |  |
| 2     | 2995.99        | 30.80             | 10.68          | 54.00             | 23.20          | 256            | 49           | Horizontal |  |  |  |
| 3     | 4924.00        | 34.35             | -14.74         | 54.00             | 19.65          | 233            | 85           | Horizontal |  |  |  |
| 4     | 4924.00        | 41.62             | -14.74         | 74.00             | 32.38          | 198            | 13           | Horizontal |  |  |  |
| 5     | 7386.00        | 48.23             | -7.78          | 74.00             | 25.77          | 175            | 345          | Horizontal |  |  |  |
| 6     | 7386.00        | 38.56             | -7.78          | 54.00             | 15.44          | 162            | 27           | Horizontal |  |  |  |

**Final Data List** 

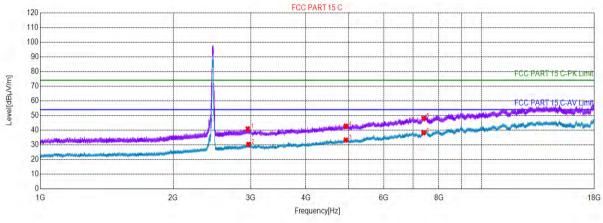


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## 802.11AX20\_Channel 11 MIMO Test Graph



### \* PK Delector \* AV Detector

### Suspected List

| Suspected List |                |                   |                |                   |                |                |              |          |
|----------------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|----------|
| NO.            | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity |
| 1              | 2951.89        | 40.90             | 10.56          | 74.00             | 33.10          | 236            | 110          | Vertical |
| 2              | 2963.09        | 30.32             | 10.46          | 54.00             | 23.68          | 187            | 149          | Vertical |
| 3              | 4924.00        | 33.25             | -14.74         | 54.00             | 20.75          | 195            | 190          | Vertical |
| 4              | 4924.00        | 42.78             | -14.74         | 74.00             | 31.22          | 211            | 118          | Vertical |
| 5              | 7386.00        | 48.01             | -7.78          | 74.00             | 25.99          | 236            | 205          | Vertical |
| 6              | 7386.00        | 38.17             | -7.78          | 54.00             | 15.83          | 174            | 102          | Vertical |

Final Data List

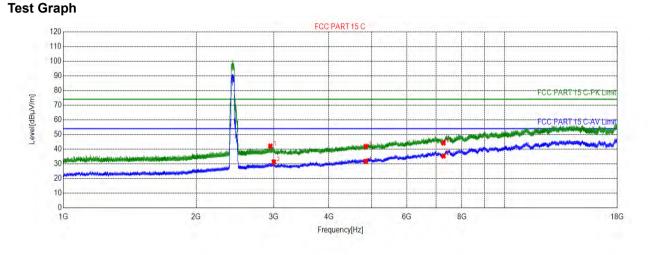


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## 802.11AX40\_Channel 3 MIMO



#### + PK Delector + AV Detector

### Suspected List

| Suspected List |                |                   |                |                   |                |                |              |            |
|----------------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|------------|
| NO.            | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity   |
| 1              | 2946.09        | 42.03             | 10.54          | 74.00             | 31.97          | 236            | 23           | Horizontal |
| 2              | 2999.60        | 31.25             | 10.80          | 54.00             | 22.75          | 241            | 350          | Horizontal |
| 3              | 4844.00        | 41.84             | -15.21         | 74.00             | 32.16          | 258            | 2            | Horizontal |
| 4              | 4844.00        | 31.82             | -15.21         | 54.00             | 22.18          | 269            | 99           | Horizontal |
| 5              | 7266.00        | 35.36             | -9.04          | 54.00             | 18.64          | 217            | 55           | Horizontal |
| 6              | 7266.00        | 44.25             | -9.04          | 74.00             | 29.75          | 222            | 99           | Horizontal |

**Final Data List** 

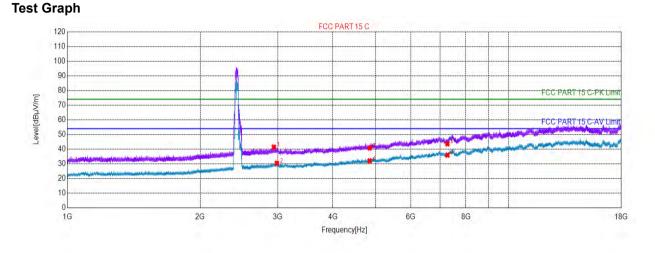


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### 802.11AX40\_Channel 3 MIMO



#### \* PK Detector \* AV Detector

### Suspected List

| Suspected List |                |                   |                |                   |                |                |              |          |
|----------------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|----------|
| NO.            | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity |
| 1              | 2938.19        | 41.38             | 10.51          | 74.00             | 32.62          | 236            | 300          | Vertical |
| 2              | 2985.09        | 30.45             | 10.52          | 54.00             | 23.55          | 156            | 136          | Vertical |
| 3              | 4844.00        | 40.75             | -15.21         | 74.00             | 33.25          | 259            | 258          | Vertical |
| 4              | 4844.00        | 32.07             | -15.21         | 54.00             | 21.93          | 215            | 26           | Vertical |
| 5              | 7266.00        | 43.59             | -9.04          | 74.00             | 30.41          | 243            | 84           | Vertical |
| 6              | 7266.00        | 35.93             | -9.04          | 54.00             | 18.07          | 211            | 143          | Vertical |

**Final Data List** 



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#### **Test Graph** FCC PART 15 C 120 110 100 90 80 FCC PART 15 C-PK LIN Level[dBµV/m] 70 60 FCC PART 15 C-AV LI 50 40 30 20 10 0 1G 2G 3G 4G 6G 8G 18G Frequency[Hz]

## 802.11AX40\_Channel 6 MIMO



#### **Suspected List**

| Suspected List |                |                   |                |                   |                |                |              |            |
|----------------|----------------|-------------------|----------------|-------------------|----------------|----------------|--------------|------------|
| NO.            | Freq.<br>[MHz] | Level<br>[dBµV/m] | Factor<br>[dB] | Limit<br>[dBµV/m] | Margin<br>[dB] | Height<br>[cm] | Angle<br>[°] | Polarity   |
| 1              | 2960.19        | 30.69             | 10.51          | 54.00             | 23.31          | 215            | 313          | Horizontal |
| 2              | 2998.89        | 41.73             | 10.77          | 74.00             | 32.27          | 224            | 113          | Horizontal |
| 3              | 4874.00        | 41.18             | -15.09         | 74.00             | 32.82          | 274            | 328          | Horizontal |
| 4              | 4874.00        | 31.94             | -15.09         | 54.00             | 22.06          | 285            | 242          | Horizontal |
| 5              | 7311.00        | 35.81             | -8.93          | 54.00             | 18.19          | 263            | 171          | Horizontal |
| 6              | 7311.00        | 46.29             | -8.93          | 74.00             | 27.71          | 223            | 242          | Horizontal |

**Final Data List** 



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