# FCC TEST REPORT

| | |
|---|---|
| **Application No.:** | AR/2021/50004 |
| **Applicant:** | Xiaomi Communications Co., Ltd. |
| **Address of Applicant** | #019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085 |
| **Manufacturer:** | Xiaomi Communications Co., Ltd. |
| **Address of Manufacturer** | #019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085 |
| **EUT Description:** | Mobile Phone |
| **Model No.:** | 21081111RG |
| **Trade Mark:** | XIAOMI |
| **FCC ID:** | 2AFZZ11RG |
| **Standards:** | 47 CFR FCC Part 2, Subpart J<br>47 CFR Part 15, Subpart C |
| **Date of Receipt:** | 2021/6/10 |
| **Date of Test:** | 2021/7/6 to 2021/7/22 |
| **Date of Issue:** | 20217/23 |
| **Test Result :** | **PASS *** |

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

Authorized Signature：

Simon Ling
Wireless Laboratory Manager



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

# 1 Version

| Revision Record | | | | |
|---|---|---|---|---|
| **Version** | **Chapter** | **Date** | **Modifier** | **Remark** |
| 01 | | 2021/7/23 | | Original |
| | | | | |
| | | | | |

| | | |
|---|---|---|
| **Authorized for issue by:** | | |
| **Prepared By** | |  **(Leah Chen) / Engineer** |
| **Checked By** | |  **(Daniel Wang) /Reviewer** |



SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd. Wireless Laboratory
1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

# 2 Test Summary

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



SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd. Wireless Laboratory
1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086
t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com

# Contents





SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd. Wireless Laboratory
1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086
t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com

# 3 General Information

## 3.1 Details of Client

| | |
|---|---|
| Applicant: | Xiaomi Communications Co., Ltd. |
| Address of Applicant | #019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085 |
| Manufacturer: | Xiaomi Communications Co., Ltd. |
| Address of Manufacturer | #019, 9th Floor, Building 6, 33 Xi'erqi Middle Road, Haidian District, Beijing, China, 100085 |

## 3.2 Test Location

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


1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 3.3 Test Facility

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

**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.**

## 3.4 General Description of EUT

| | |
|---|---|
| EUT Description: | Mobile Phone |
| Model No.: | 21081111RG |
| Trade Mark: | XIAOMI |
| Hardware Version: | P2 |
| Software Version: | MIUI 12.5 |
| IEEE 802.11 WLAN Mode Supported | ☒ 802.11b (20 MHz channel bandwidth),<br>☒ 802.11g (20 MHz channel bandwidth)<br>☒ 802.11n/ /ax (20 MHz channel bandwidth),<br>☒ 802.11n /ax (40 MHz channel bandwidth) |
| 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 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) /ax(VHE20) : OFDM/OFDMA<br>IEEE for 802.11n(HT40) /ax(VHE40) : OFDM/OFDMA |
| Sample Type: | ☒ Portable Device, ☐Module |
| Antenna Type: | PIFA |
| Antenna Ports | ☒ Ant 1, ☐ Ant 2, ☐ Ant 3 |
| Smart System | ☒ SISO (for 802.11b/g/n /ax),<br>☒ MIMO (for 802.11 b/g/n /ax): 2 Tx & 2 Rx,<br>☐ Diversity (for 802.11b/g) : Tx & Rx |
| Antenna Gain: | -2.9dBi(Ant7); 0.5dBi(Ant9) |

| Operation Frequency of each channel (802.11 b/g/n HT20 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 ax VHE40)** | | | | | | | |
| **Channel** | **Frequency** | **Channel** | **Frequency** | **Channel** | **Frequency** | **Channel** | **Frequency** |
| 3 | 2422MHz | 6 | 2437MHz | 9 | 2452MHz | | |
| 4 | 2427MHz | 7 | 2442MHz | | | | |
| 5 | 2432MHz | 8 | 2447MHz | | | | |

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 (HT20) /ax(VHE20) | Frequency for 802.11n (HT40)/ 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.

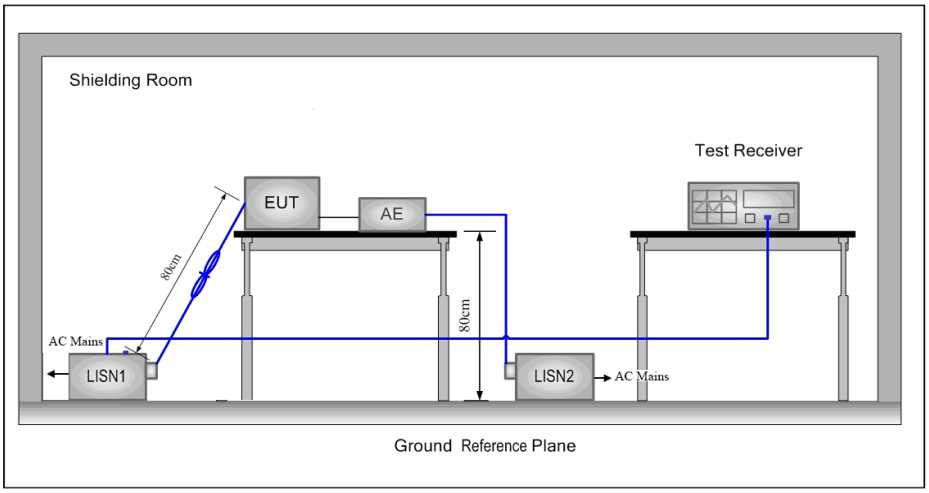
# 4 Test results and Measurement Data

## 4.1 Antenna Requirement

| **Standard requirement:** | 47 CFR Part 15C Section 15.203 /247(c) |
|---|---|
| 15.203 requirement:<br>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.<br>15.247(b) (4) requirement:<br>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 -2.9dBi(Ant7) and 0.5dBi(Ant9). | |

## 4.2 AC Power Line Conducted Emissions

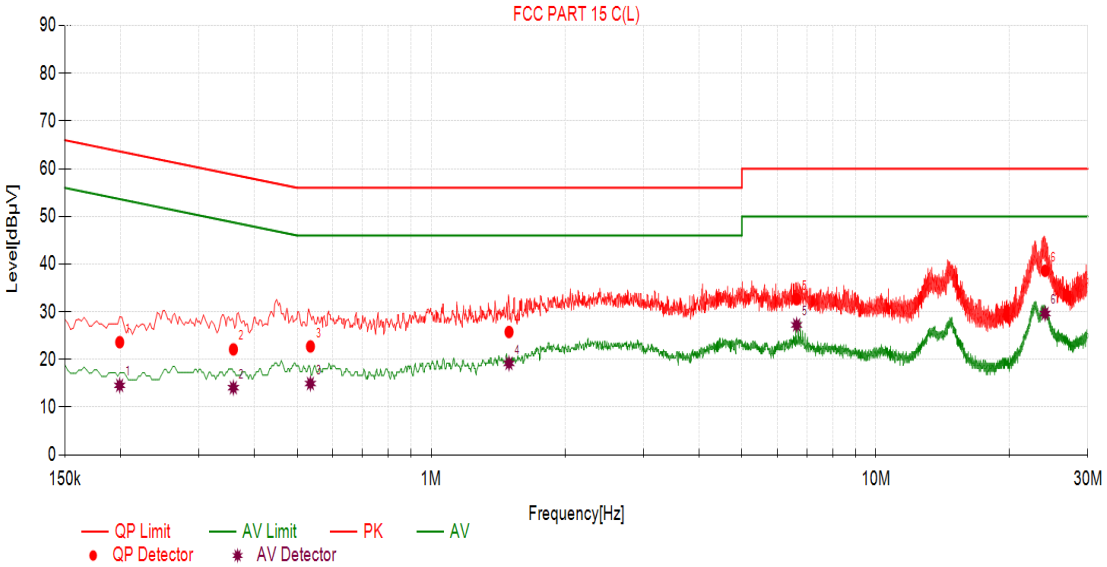
| | | | |
|---|---|---|---|
| Test Requirement: | 47 CFR Part 15C Section 15.207 | | |
| Test Method: | ANSI C63.10: 2013 | | |
| Test Frequency Range: | 150kHz to 30MHz | | |
| Limit: | Frequency range (MHz) | Limit (dBuV) | |
| | | Quasi-peak | Average |
| | 0.15-0.5 | 66 to 56* | 56 to 46* |
| | 0.5-5 | 56 | 46 |
| | 5-30 | 60 | 50 |
| | * Decreases with the logarithm of the frequency. | | |
| Test Procedure: | 1) The mains terminal disturbance voltage test was conducted in a shielded room.<br>2) The EUT was connected to AC power source through a LISN 1 (Line Impedance Stabilization Network) which provides a 50Ω/50μH + 5Ω linear impedance. The power cables of all other units of the EUT were connected to a second LISN 2, which was bonded to the ground reference plane in the same way as the LISN 1 for the unit being measured. A multiple socket outlet strip was used to connect multiple power cables to a single LISN provided the rating of the LISN was not exceeded.<br>3) The tabletop EUT was placed upon a non-metallic table 0.8m above the ground reference plane. And for floor-standing arrangement, the EUT was placed on the horizontal ground reference plane,<br>4) The test was performed with a vertical ground reference plane. The rear of the EUT shall be 0.4 m from the vertical ground reference plane. The vertical ground reference plane was bonded to the horizontal ground reference plane. The LISN 1 was placed 0.8 m from the boundary of the unit under test and bonded to a ground reference plane for LISNs mounted on top of the ground reference plane. This distance was between the closest points of the LISN 1 and the EUT. All other units of the EUT and associated equipment was at least 0.8 m from the LISN 2. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10: 2013 on conducted measurement. | | |

| | |
|---|---|
| Test Setup: |  |
| Exploratory Test Mode: | Transmitting with all kind of modulations, data rates at lowest, middle and highest channel.<br>Charge + Transmitting mode. |
| Final Test Mode: | Through Pre-scan, find the 1Mbps of rate of 802.11B at lowest channel is the worst case.<br>Charge + Transmitting mode.<br>Only the worst case is recorded in the report. |
| Instruments Used: | Refer to section 6 for details |
| Test Results: | Pass |

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.

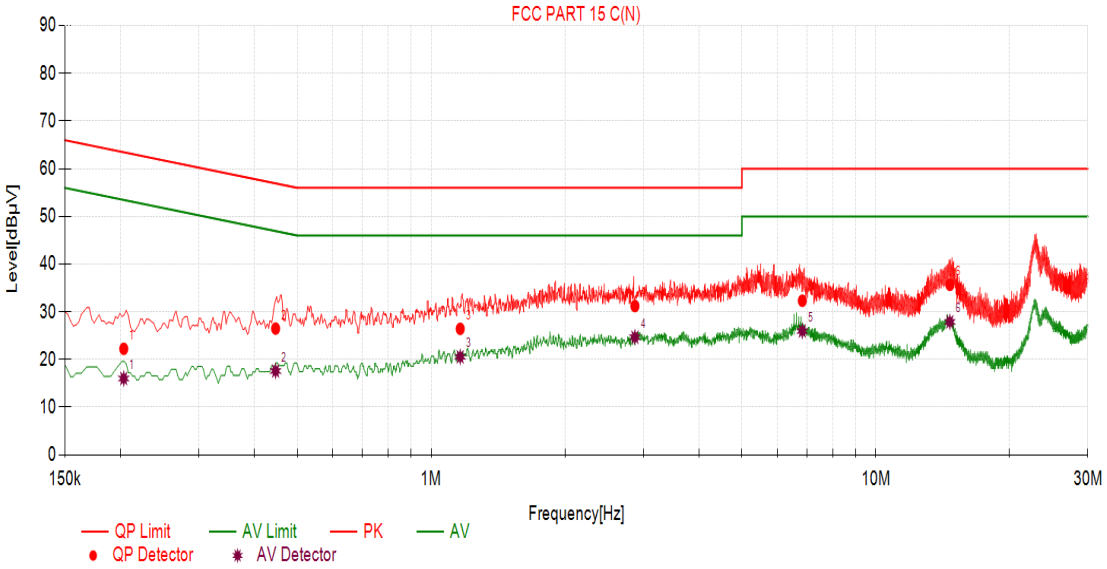
Live Line:




**Test Graph**

| Final Data List | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Factor [dB] | QP Value [dBµV] | QP Limit [dBµV] | QP Margin [dB] | AV Value [dBµV] | AV Limit [dBµV] | AV Margin [dB] | Verdict |
| 1 | 0.1993 | 10.10 | 23.63 | 63.64 | 40.01 | 14.58 | 53.64 | 39.06 | PASS |
| 2 | 0.3591 | 10.10 | 22.13 | 58.75 | 36.62 | 14.09 | 48.75 | 34.66 | PASS |
| 3 | 0.5352 | 10.10 | 22.75 | 56.00 | 33.25 | 14.97 | 46.00 | 31.03 | PASS |
| 4 | 1.4968 | 10.10 | 25.78 | 56.00 | 30.22 | 19.20 | 46.00 | 26.80 | PASS |
| 5 | 6.6379 | 10.10 | 32.66 | 60.00 | 27.34 | 27.25 | 50.00 | 22.75 | PASS |
| 6 | 24.0425 | 10.11 | 38.61 | 60.00 | 21.39 | 29.65 | 50.00 | 20.35 | PASS |

Neutral Line:




**Test Graph**

| Final Data List | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Factor [dB] | QP Value [dBµV] | QP Limit [dBµV] | QP Margin [dB] | AV Value [dBµV] | AV Limit [dBµV] | AV Margin [dB] | Verdict |
| 1 | 0.2035 | 10.10 | 22.25 | 63.47 | 41.22 | 16.02 | 53.47 | 37.45 | PASS |
| 2 | 0.4469 | 10.10 | 26.50 | 56.93 | 30.43 | 17.60 | 46.93 | 29.33 | PASS |
| 3 | 1.1625 | 10.10 | 26.44 | 56.00 | 29.56 | 20.56 | 46.00 | 25.44 | PASS |
| 4 | 2.8730 | 10.10 | 31.22 | 56.00 | 24.78 | 24.67 | 46.00 | 21.33 | PASS |
| 5 | 6.8366 | 10.10 | 32.34 | 60.00 | 27.66 | 25.98 | 50.00 | 24.02 | PASS |
| 6 | 14.6815 | 10.11 | 35.67 | 60.00 | 24.33 | 27.90 | 50.00 | 22.10 | PASS |

Remark:

1. The following Quasi-Peak and Average measurements were performed on the EUT:

2. Final Test Level =Receiver Reading + LISN Factor + Cable Loss.

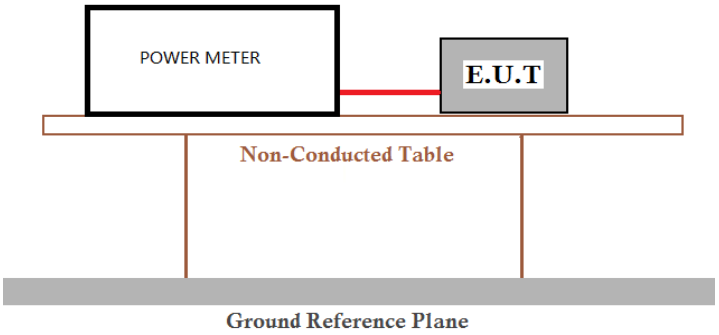
## 4.3 Duty Cycle

The detailed test data see: **Appendix C**



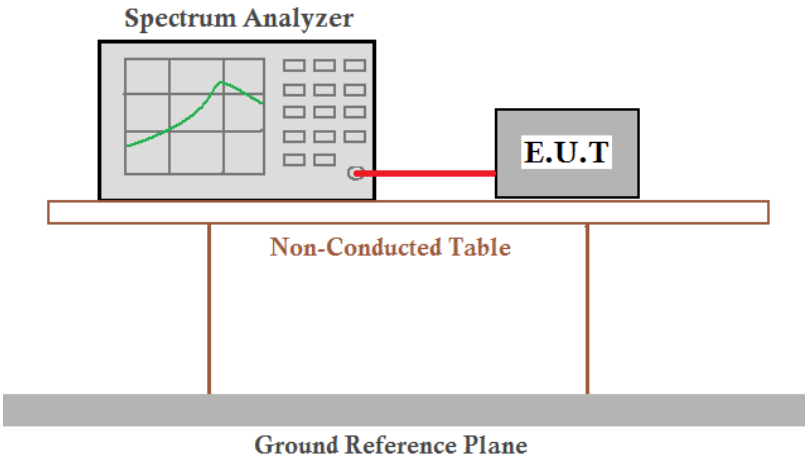
1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 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: |  |
| 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) /ax(VHE20);<br>13.5Mbps of rate is the worst case of 802.11n(HT40) /ax(VHE40). |
| Limit: | 30dBm |
| Test Results: | Pass |

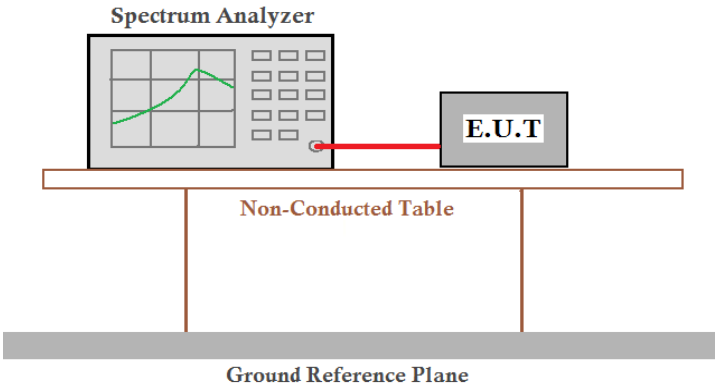
The detailed test data see: **Appendix C**

## 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: |  |
| 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(VHE20);<br>13.5Mbps of rate is the worst case of 802.11n(HT40) /ax(VHE40). |
| Limit: | ≥ 500 kHz |
| Test Results: | Pass |

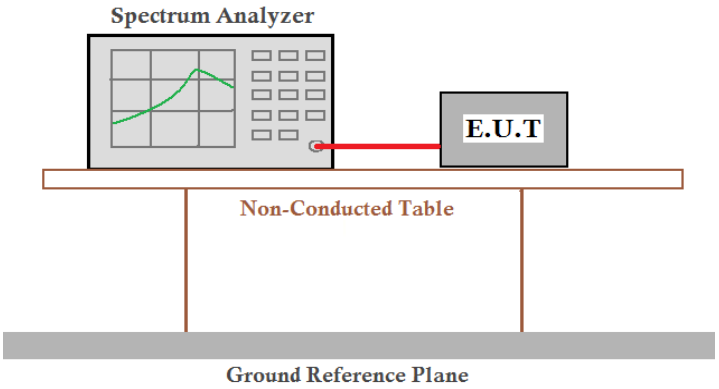
The detailed test data see: **Appendix C**

## 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: |  |
| 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) /ax(VHE20);<br>13.5Mbps of rate is the worst case of 802.11n(HT40) /ax(VHE40). |
| Limit: | ≤8.00dBm/3kHz |
| Test Results: | Pass |

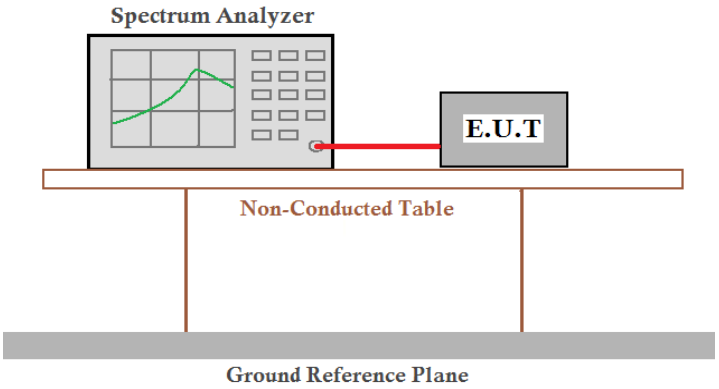
The detailed test data see: **Appendix C**

## 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: |  |
| 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(VHE20);<br>13.5Mbps of rate is the worst case of 802.11n(HT40) /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 C**

## 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: |  |
| 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(VHE20);<br>13.5Mbps of rate is the worst case of 802.11n(HT40) /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 C**

## 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: 3m or 10m (Semi-Anechoic Chamber) | | | | |
| Receiver Setup: | Frequency | Detector | RBW | VBW | 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 |
| | Above 1GHz | Peak | 1MHz | 3MHz | Peak |
| | | Peak | 1MHz | 10Hz (DC⩾0.98) ⩾1/T (DC<0.98) | Average |
| Limit: | Frequency | Field strength (microvolt/meter) | Limit (dBuV/m) | Remark | Measurement 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 emissions is 20dB above the maximum permitted average emission limit applicable to the equipment under test. This peak limit applies to the total peak emission level radiated by the device. | | | | |

| Test Setup: | |
|---|---|

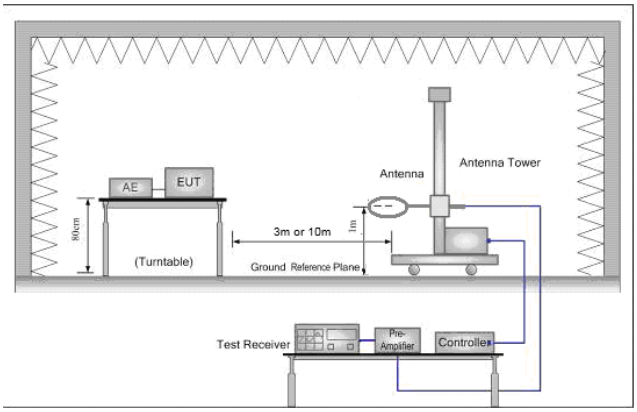



Figure 1. Below 30MHz

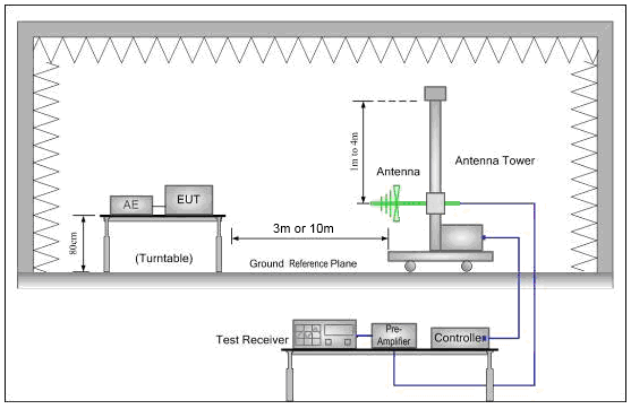



Figure 2. 30MHz to 1GHz

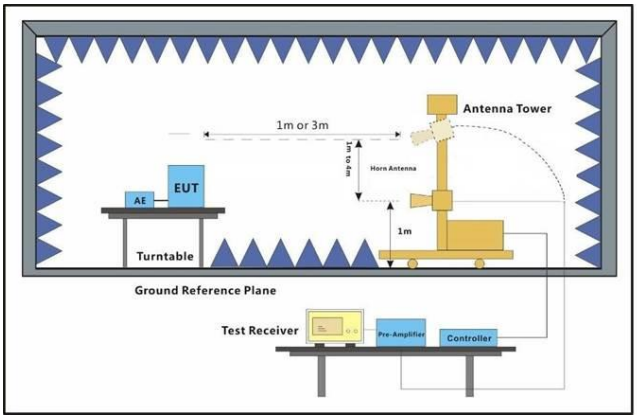



Figure 3. Above 1 GHz

| Test Procedure: | 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.<br>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<br>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.<br>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.<br>e. Use the following spectrum analyzer settings:<br>(1) Span shall wide enough to fully capture the emission being measured;<br>(2) Set RBW=100 kHz for f < 1 GHz, RBW=1MHz for f>1GHz ; VBW ≥ RBW; Sweep = auto;<br>Detector function = peak; Trace = max hold for peak<br>(3) For average measurement: use duty cycle correction factor method per 15.35(c). |
|---|---|



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

| | |
|---|---|
| | Duty cycle = On time/100 milliseconds<br>On time = N 1 *L 1 +N 2 *L 2 +...+N n-1 *LN n-1 +N n *L n<br>Where N 1 is number of type 1 pulses, L 1 is length of type 1 pulses, etc.<br>Average Emission Level = Peak Emission Level + 20*log(Duty cycle)<br>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.<br>g. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.<br>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.<br>i. Test the EUT in the lowest channel, the middle channel ,the Highest channel.<br>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.<br>k. Repeat above procedures until all frequencies measured was complete. |
| 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) /ax(VHE20);<br>13.5Mbps of rate is the worst case of 802.11n(HT40) /ax(VHE40).<br>For below 1GHz, through Pre-scan, find the 1Mbps of rate of 802.11B at lowest channel is the worst case. 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**

## 4.10 Restricted bands around fundamental frequency

| | | | |
|---|---|---|---|
| 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: 3m or 10m (Semi-Anechoic Chamber) | | |
| Limit: | 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 |
| | | 74.0 | Peak Value |
| Test Setup: | | | |

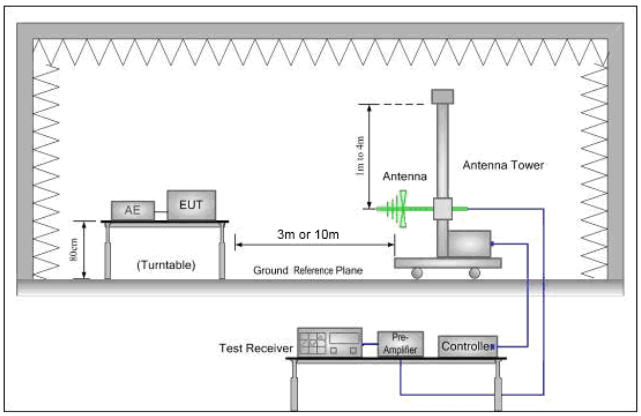



Figure 1. 30MHz to 1GHz

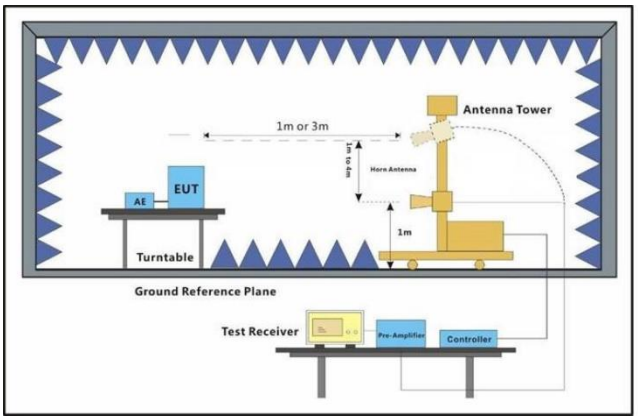



Figure 2. Above 1 GHz

| | |
|---|---|
| Test Procedure: | 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.<br>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.<br>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.<br>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.<br>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 rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.<br>f. The test-receiver system was set to Peak Detect Function and Specified Bandwidth with Maximum Hold Mode.<br>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<br>h. Test the EUT in the lowest channel , the Highest channel<br>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.<br>j. Repeat above procedures until all frequencies measured was complete. |
| 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) /ax(VHE20);<br>13.5Mbps of rate is the worst case of 802.11n(HT40) /ax(VHE40).<br>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**

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

| No. | Item | Measurement Uncertainty |
|---|---|---|
| 1 | Total RF power, conducted | ±0.35dB |
| 2 | RF power density, conducted | ±1.96dB |
| 3 | Spurious emissions, conducted | ±0.41dB |
| 4 | Radio Frequency | ±7.10 x 10-8 |
| 5 | Duty Cycle | ±0.49% |
| 6 | Occupied Bandwidth | ±0.2% |
| 7 | Frquency Stability | ±0.2ppm |
| 8 | Conduction Emission | ± 3.0dB (150kHz to 30MHz) |
| 9 | Radiated Emission | ± 4.8dB (Below 1GHz) |
| | | ± 4.8dB (1GHz to 6GHz) |
| | | ± 4.5dB (6GHz to 18GHz) |
| | | ± 5.02dB (Above 18GHz) |

# 6 Equipment List

| RF conducted | | | | | |
|---|---|---|---|---|---|
| **Test Equipment** | **Manufacturer** | **Model No.** | **Inventory No.** | **Cal. Date (yyyy-mm-dd)** | **Cal. Due date (yyyy-mm-dd)** |
| Temperature and humidity meter | MingGao | T809 | XAW01-01-04 | 2020/11/6 | 2021/11/5 |
| Radio communication analyzer | ROHDE&SCHWARZ | CMW 500 | XAW01-03-07 | 2020/10/26 | 2021/10/25 |
| Spectrum Analyzer | ROHDE&SCHWARZ | FSU | 100366 | 2021/6/8 | 2022/6/7 |
| Spectrum Analyzer | ROHDE&SCHWARZ | FSV3044 | 101146 | 2021/6/8 | 2022/6/7 |
| temperature chamber | Votsch | VT4002 | XAW01-18-01 | 2021/4/1 | 2022/3/31 |
| Filter bank | Tonscend | JS0806-F | 19C8060147 | NCR | NCR |
| RF control unit | Tonscend | JS0806-1 | NCR | NCR | NCR |
| Test Software | Tonscend | JS1120-3 （v2.6.77.0518） | NCR | NCR | NCR |

| CE Test System | | | | | |
|---|---|---|---|---|---|
| **Equipment** | **Manufacturer** | **Model No.** | **Inventory No.** | **Cal Date** | **Cal Due 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 humidity meter | MingGao | TH101B | XAW01-01-01 | 2020-11-06 | 2021-11-05 |
| Measurement Software | Tonscend | TS+ CE V2.5 | XAW02-05-02 | NCR | NCR |



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

| RSE Test System | | | | | |
|---|---|---|---|---|---|
| **Equipment** | **Manufacturer** | **Model No.** | **Inventory No.** | **Cal Date** | **Cal Due Date** |
| Semi-Anechoic 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 (30MHz-3GHz) | Schwarzbeck | VULB 9163 | XAW01-09-01 | 2019-10-13 | 2021-10-12 |
| Receiving antenna (1GHz~18GHz) | Schwarzbeck | BBHA 9120D | XAW01-09-02 | 2019-10-13 | 2021-10-12 |
| Receiving antenna (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 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 humidity meter | MingGao | TH101B | XAW01-01-01 | 2020-11-06 | 2021-11-05 |
| Measurement Software | Tonscend | TS+ RSE V3.0.0.2 | XAW02-05-01 | NCR | NCR |

# 7 Photographs - EUT Constructional Details

Refer to Appendix A Setup Photos.



SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd. Wireless Laboratory
1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

# Appendix



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

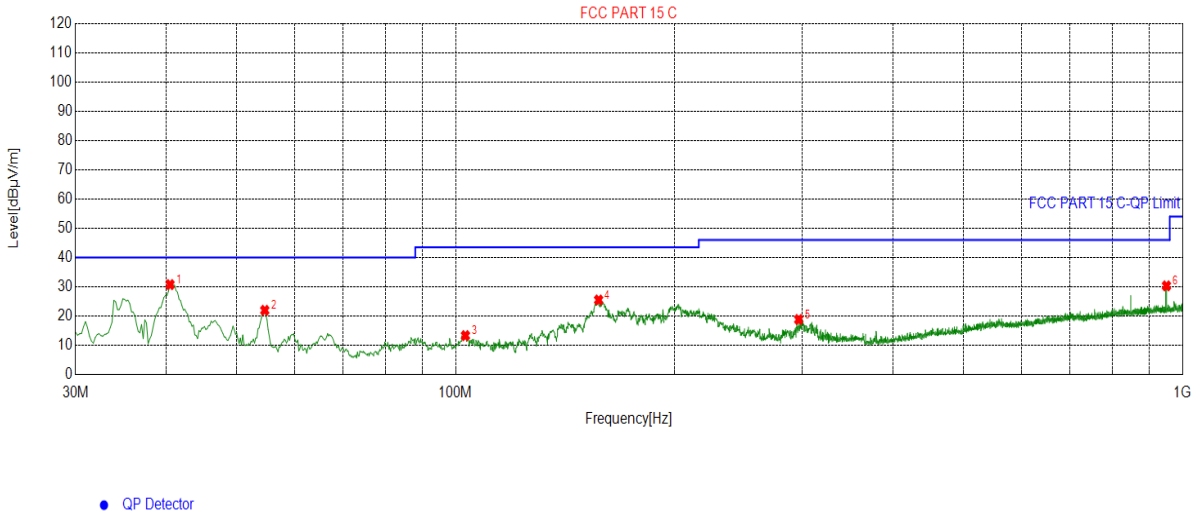
# Radiated Spurious Emissions

## Radiated emission below 1GHz

## MIMO(Worst case):

## Charge + Transmitting

### Test Graph




### Suspected List

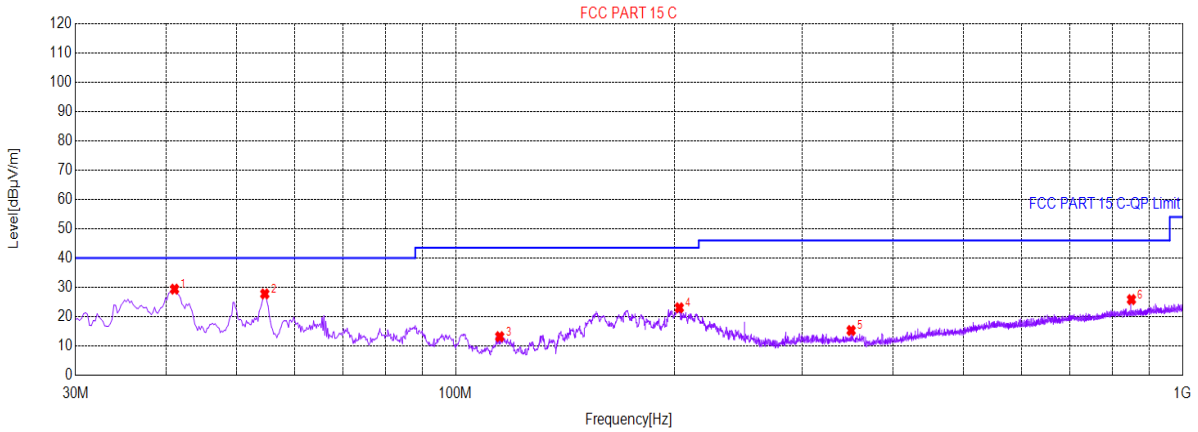
| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 40.4781 | 30.74 | -22.26 | 40.00 | 9.26 | 274 | 35 | Horizontal |
| 2 | 54.6429 | 21.96 | -22.05 | 40.00 | 18.04 | 256 | 264 | Horizontal |
| 3 | 103.152 | 13.32 | -22.91 | 43.50 | 30.18 | 175 | 143 | Horizontal |
| 4 | 157.289 | 25.49 | -25.62 | 43.50 | 18.01 | 284 | 250 | Horizontal |
| 5 | 296.415 | 18.82 | -19.43 | 46.00 | 27.18 | 241 | 53 | Horizontal |
| 6 | 949.938 | 30.31 | -7.23 | 46.00 | 15.69 | 165 | 144 | Horizontal |

### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## Test Graph




## Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 41.0602 | 29.39 | -22.15 | 40.00 | 10.61 | 174 | 232 | Vertical |
| 2 | 54.6429 | 27.76 | -22.05 | 40.00 | 12.24 | 184 | 10 | Vertical |
| 3 | 114.989 | 13.19 | -23.80 | 43.50 | 30.31 | 175 | 16 | Vertical |
| 4 | 203.082 | 23.02 | -22.28 | 43.50 | 20.48 | 189 | 308 | Vertical |
| 5 | 349.970 | 15.28 | -17.73 | 46.00 | 30.72 | 214 | 98 | Vertical |
| 6 | 850.202 | 25.83 | -8.54 | 46.00 | 20.17 | 241 | 219 | Vertical |

## Final Data List



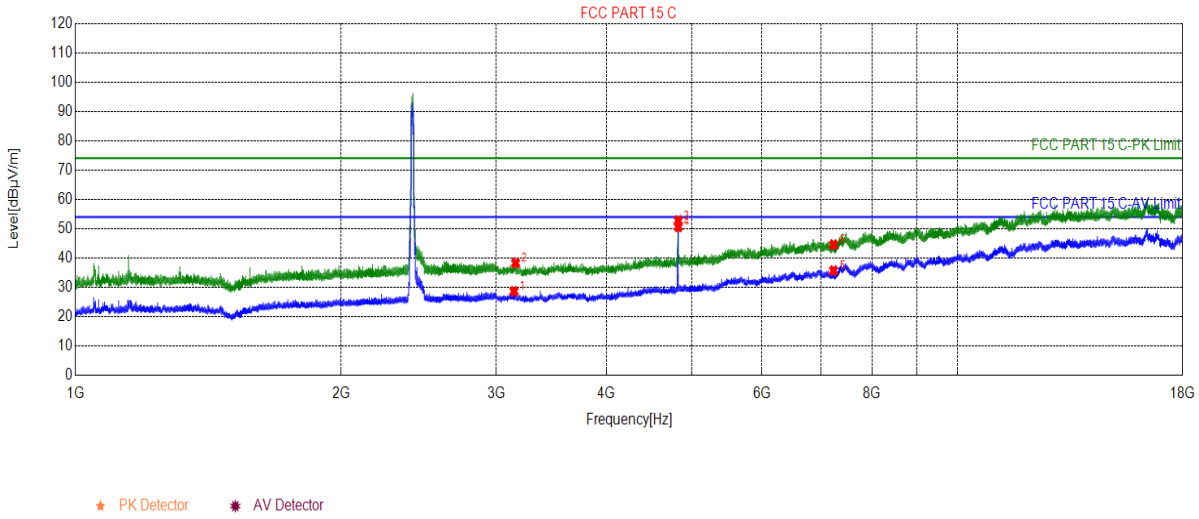
1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086
t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com

## Transmitter emission above 1GHz

**MIMO(Worst case):**

**802.11b_Channel 1**

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBμV/m] | Factor [dB] | Limit [dBμV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 3142.20 | 28.63 | -23.33 | 54.00 | 25.37 | 263 | 333 | Horizontal |
| 2 | 3155.40 | 38.26 | -23.29 | 74.00 | 35.74 | 272 | 262 | Horizontal |
| 3 | 4824.07 | 52.75 | -18.20 | 74.00 | 21.25 | 215 | 74 | Horizontal |
| 4 | 4824.67 | 50.62 | -18.20 | 54.00 | 3.38 | 152 | 74 | Horizontal |
| 5 | 7236.00 | 35.67 | -10.83 | 54.00 | 18.33 | 175 | 45 | Horizontal |
| 6 | 7236.00 | 44.55 | -10.83 | 74.00 | 29.45 | 126 | 348 | Horizontal |

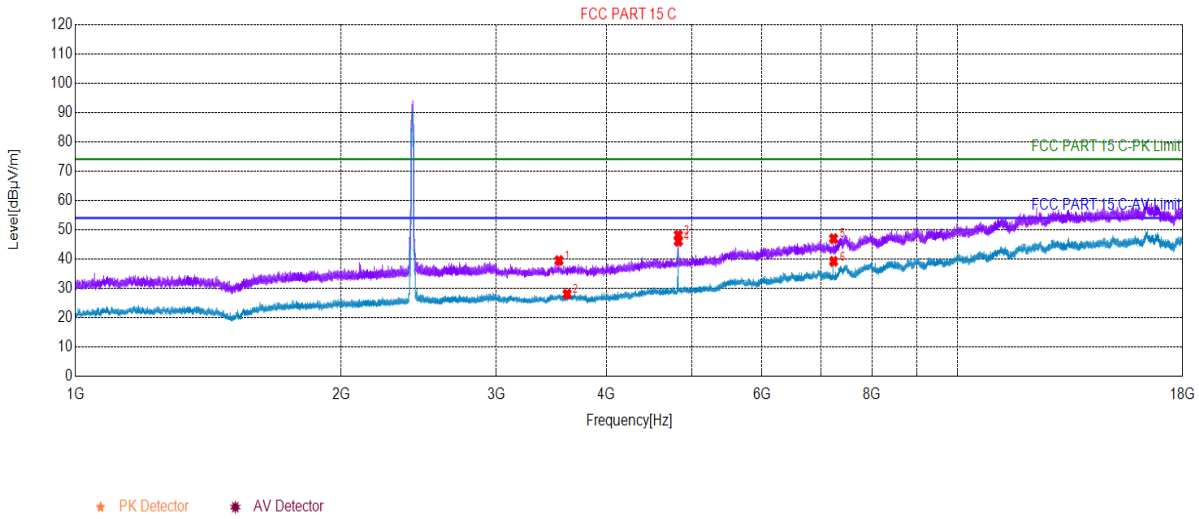
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086
t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11b_Channel 1

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 3532.82 | 39.49 | -22.63 | 74.00 | 34.51 | 263 | 130 | Vertical |
| 2 | 3609.02 | 28.03 | -22.60 | 54.00 | 25.97 | 245 | 72 | Vertical |
| 3 | 4824.00 | 48.13 | -18.20 | 74.00 | 25.87 | 212 | 13 | Vertical |
| 4 | 4824.67 | 46.07 | -18.20 | 54.00 | 7.93 | 296 | 13 | Vertical |
| 5 | 7236.00 | 46.95 | -10.83 | 74.00 | 27.05 | 275 | 130 | Vertical |
| 6 | 7236.00 | 39.19 | -10.83 | 54.00 | 14.81 | 211 | 144 | Vertical |

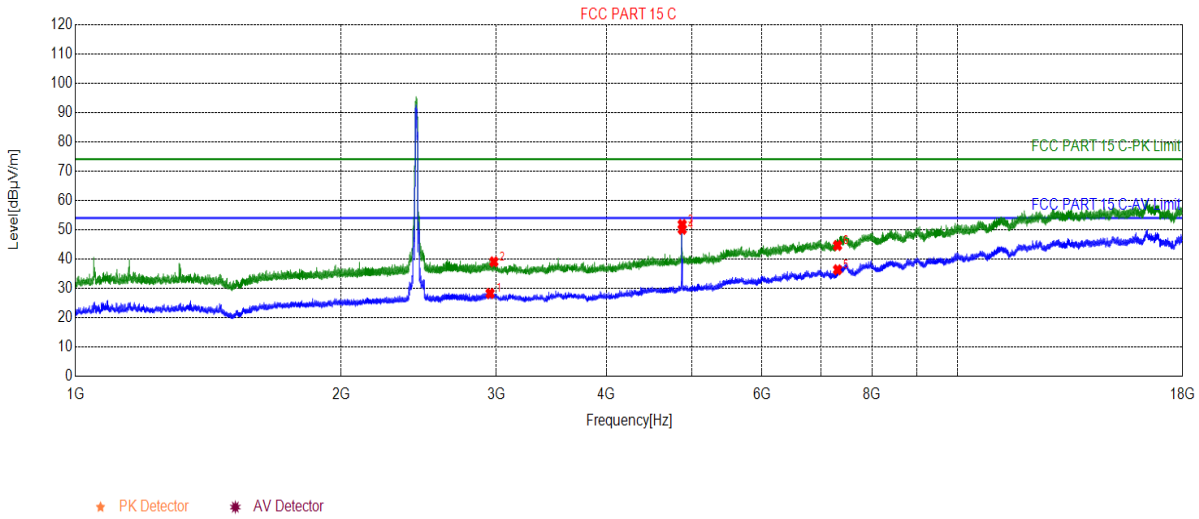
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11b_Channel 6

### Test Graph



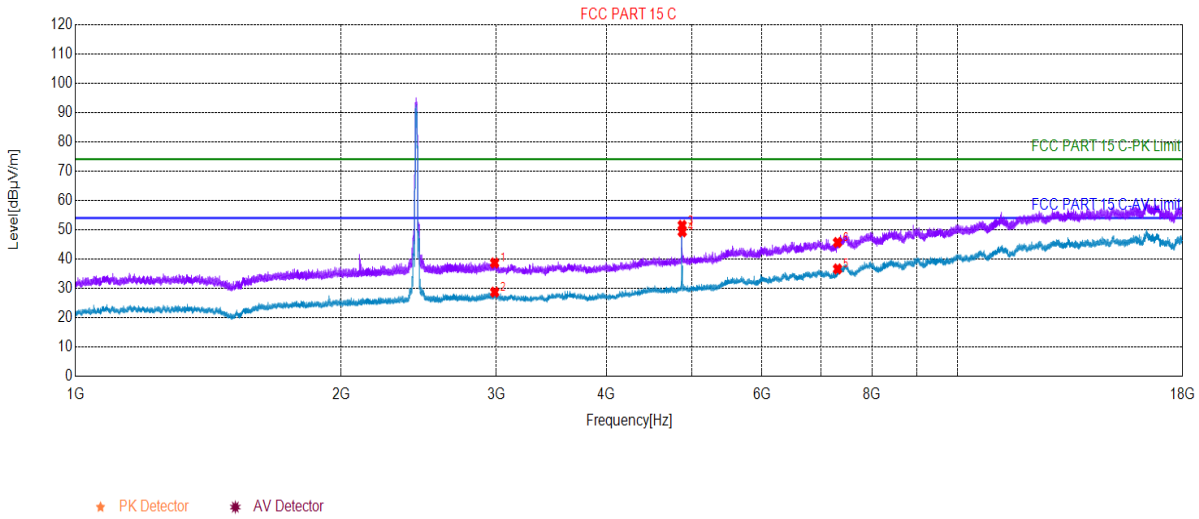

### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 2951.99 | 28.26 | 7.97 | 54.00 | 25.74 | 233 | 212 | Horizontal |
| 2 | 2980.99 | 39.05 | 7.90 | 74.00 | 34.95 | 254 | 59 | Horizontal |
| 3 | 4873.87 | 51.75 | -18.02 | 74.00 | 22.25 | 282 | 74 | Horizontal |
| 4 | 4874.47 | 50.12 | -18.02 | 54.00 | 3.88 | 106 | 74 | Horizontal |
| 5 | 7311.00 | 36.33 | -10.82 | 54.00 | 17.67 | 222 | 118 | Horizontal |
| 6 | 7311.00 | 44.60 | -10.82 | 74.00 | 29.40 | 136 | 101 | Horizontal |

### Final Data List

## 802.11b_Channel 6

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 2986.69 | 38.64 | 7.85 | 74.00 | 35.36 | 172 | 185 | Vertical |
| 2 | 2987.39 | 28.70 | 7.85 | 54.00 | 25.30 | 263 | 59 | Vertical |
| 3 | 4873.87 | 51.47 | -18.02 | 74.00 | 22.53 | 206 | 189 | Vertical |
| 4 | 4874.47 | 49.26 | -18.02 | 54.00 | 4.74 | 218 | 189 | Vertical |
| 5 | 7311.00 | 36.61 | -10.82 | 54.00 | 17.39 | 306 | 246 | Vertical |
| 6 | 7311.00 | 45.64 | -10.82 | 74.00 | 28.36 | 100 | 320 | Vertical |

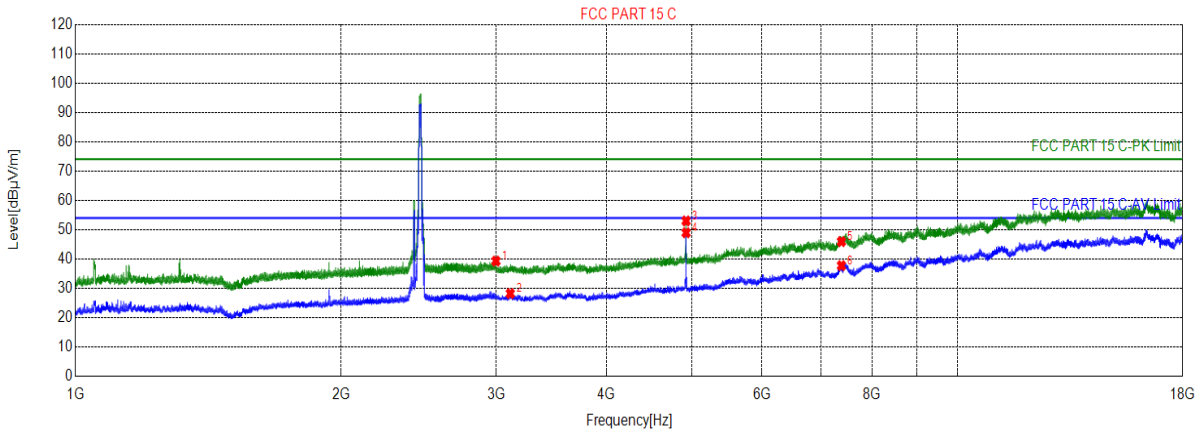
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11b_Channel 11

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 2997.49 | 39.29 | 8.05 | 74.00 | 34.71 | 254 | 10 | Horizontal |
| 2 | 3111.60 | 28.22 | -23.84 | 54.00 | 25.78 | 261 | 103 | Horizontal |
| 3 | 4923.67 | 52.98 | -17.71 | 74.00 | 21.02 | 152 | 74 | Horizontal |
| 4 | 4924.27 | 48.94 | -17.70 | 54.00 | 5.06 | 175 | 88 | Horizontal |
| 5 | 7386.00 | 45.93 | -9.56 | 74.00 | 28.07 | 169 | 290 | Horizontal |
| 6 | 7386.00 | 37.74 | -9.56 | 54.00 | 16.26 | 138 | 334 | Horizontal |

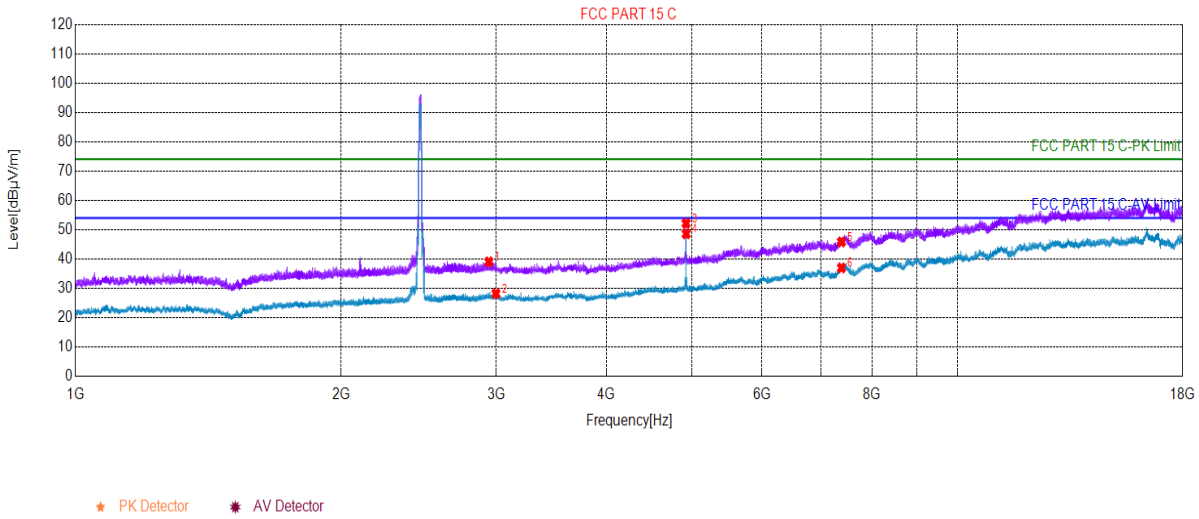
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11b_Channel 11

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 2942.29 | 39.04 | 7.95 | 74.00 | 34.96 | 263 | 314 | Vertical |
| 2 | 2997.09 | 28.19 | 8.04 | 54.00 | 25.81 | 242 | 350 | Vertical |
| 3 | 4923.67 | 52.15 | -17.71 | 74.00 | 21.85 | 281 | 189 | Vertical |
| 4 | 4924.87 | 48.58 | -17.70 | 54.00 | 5.42 | 242 | 203 | Vertical |
| 5 | 7386.00 | 45.81 | -9.56 | 74.00 | 28.19 | 277 | 117 | Vertical |
| 6 | 7386.00 | 36.97 | -9.56 | 54.00 | 17.03 | 269 | 0 | Vertical |

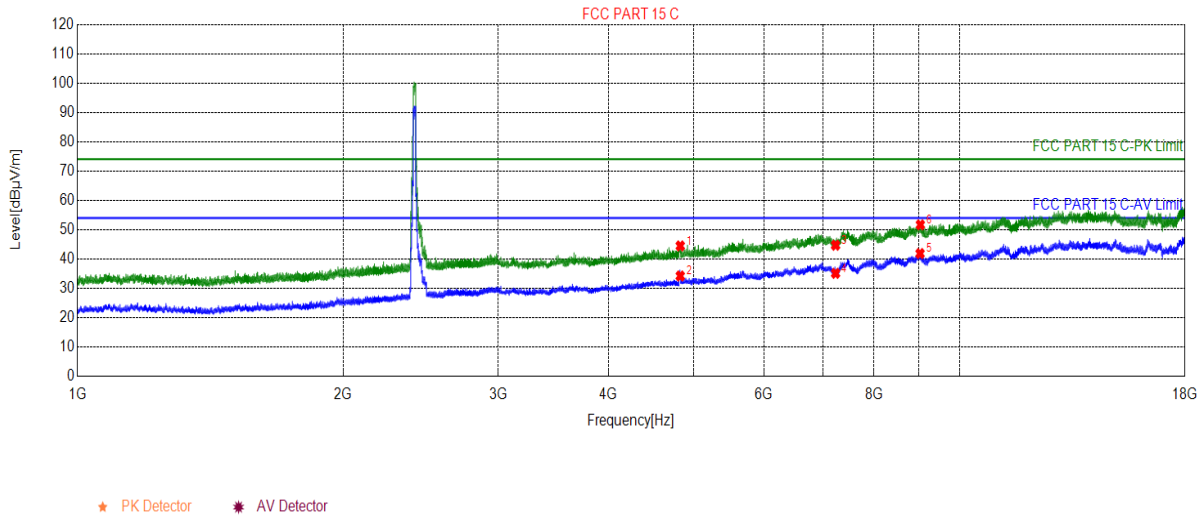
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11g_Channel 1

### Test Graph



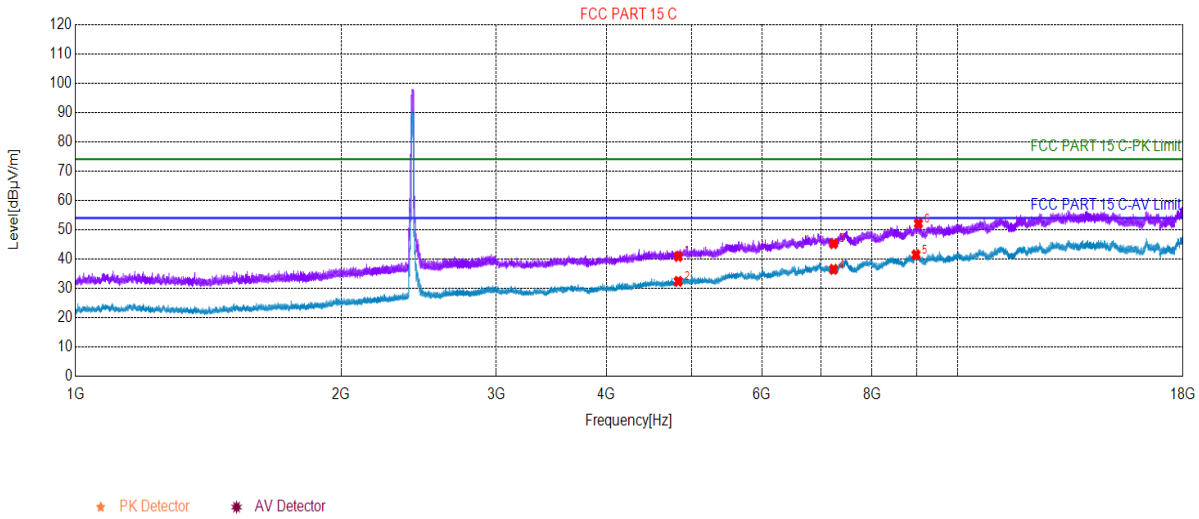

### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 4824.00 | 44.47 | -15.31 | 74.00 | 29.53 | 174 | 46 | Horizontal |
| 2 | 4824.00 | 34.21 | -15.31 | 54.00 | 19.79 | 185 | 60 | Horizontal |
| 3 | 7236.00 | 44.70 | -8.82 | 74.00 | 29.30 | 269 | 291 | Horizontal |
| 4 | 7236.00 | 35.11 | -8.82 | 54.00 | 18.89 | 289 | 46 | Horizontal |
| 5 | 9021.24 | 41.86 | -3.75 | 54.00 | 12.14 | 184 | 202 | Horizontal |
| 6 | 9029.04 | 51.66 | -3.78 | 74.00 | 22.34 | 124 | 246 | Horizontal |

### Final Data List

## 802.11g _Channel 1

### Test Graph



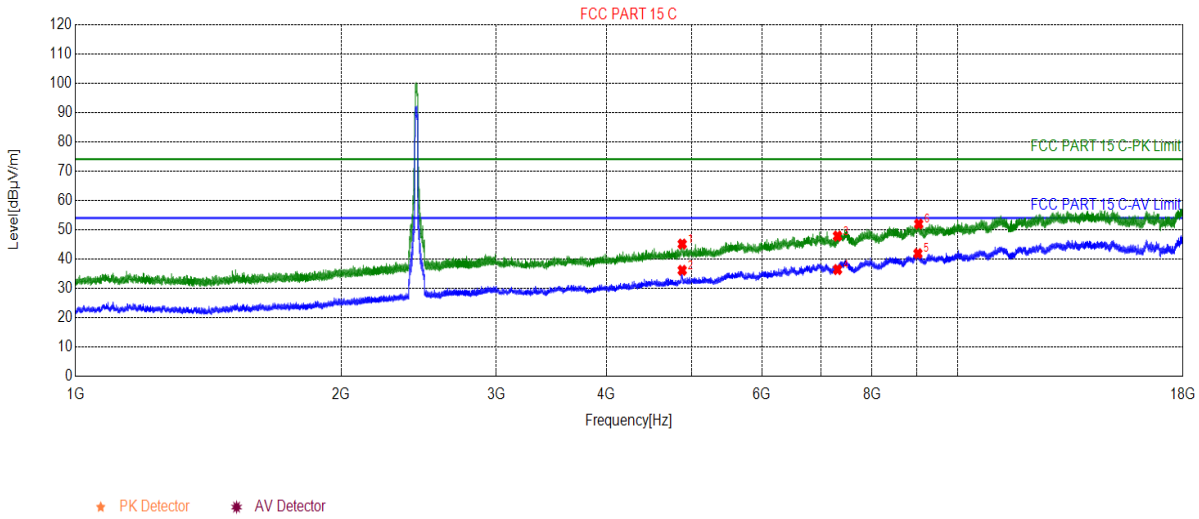

### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 4824.00 | 40.87 | -15.31 | 74.00 | 33.13 | 174 | 3 | Vertical |
| 2 | 4824.00 | 32.38 | -15.31 | 54.00 | 21.62 | 185 | 189 | Vertical |
| 3 | 7236.00 | 45.21 | -8.82 | 74.00 | 28.79 | 258 | 304 | Vertical |
| 4 | 7236.00 | 36.49 | -8.82 | 54.00 | 17.51 | 296 | 160 | Vertical |
| 5 | 8972.03 | 41.47 | -3.93 | 54.00 | 12.53 | 213 | 30 | Vertical |
| 6 | 9029.04 | 52.09 | -3.78 | 74.00 | 21.91 | 261 | 218 | Vertical |

### Final Data List

## 802.11g _Channel 6

### Test Graph



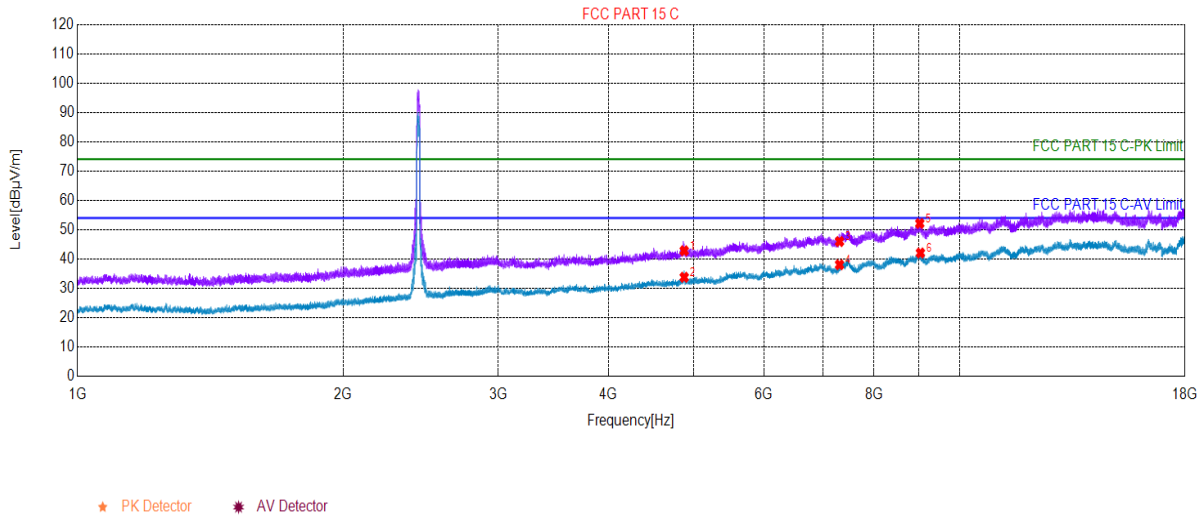

### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 4874.00 | 45.10 | -15.09 | 74.00 | 28.90 | 171 | 305 | Horizontal |
| 2 | 4874.00 | 36.14 | -15.09 | 54.00 | 17.86 | 185 | 43 | Horizontal |
| 3 | 7311.00 | 47.82 | -8.93 | 74.00 | 26.18 | 199 | 147 | Horizontal |
| 4 | 7311.00 | 36.40 | -8.93 | 54.00 | 17.60 | 213 | 320 | Horizontal |
| 5 | 9018.24 | 41.86 | -3.74 | 54.00 | 12.14 | 262 | 162 | Horizontal |
| 6 | 9036.84 | 51.94 | -3.81 | 74.00 | 22.06 | 174 | 277 | Horizontal |

### Final Data List

## 802.11g _Channel 6

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 4874.00 | 42.81 | -15.09 | 74.00 | 31.19 | 174 | 29 | Vertical |
| 2 | 4874.00 | 33.76 | -15.09 | 54.00 | 20.24 | 188 | 203 | Vertical |
| 3 | 7311.00 | 45.96 | -8.93 | 74.00 | 28.04 | 296 | 262 | Vertical |
| 4 | 7311.00 | 38.05 | -8.93 | 54.00 | 15.95 | 213 | 277 | Vertical |
| 5 | 9015.24 | 52.12 | -3.72 | 74.00 | 21.88 | 261 | 59 | Vertical |
| 6 | 9029.64 | 42.05 | -3.78 | 54.00 | 11.95 | 274 | 203 | Vertical |

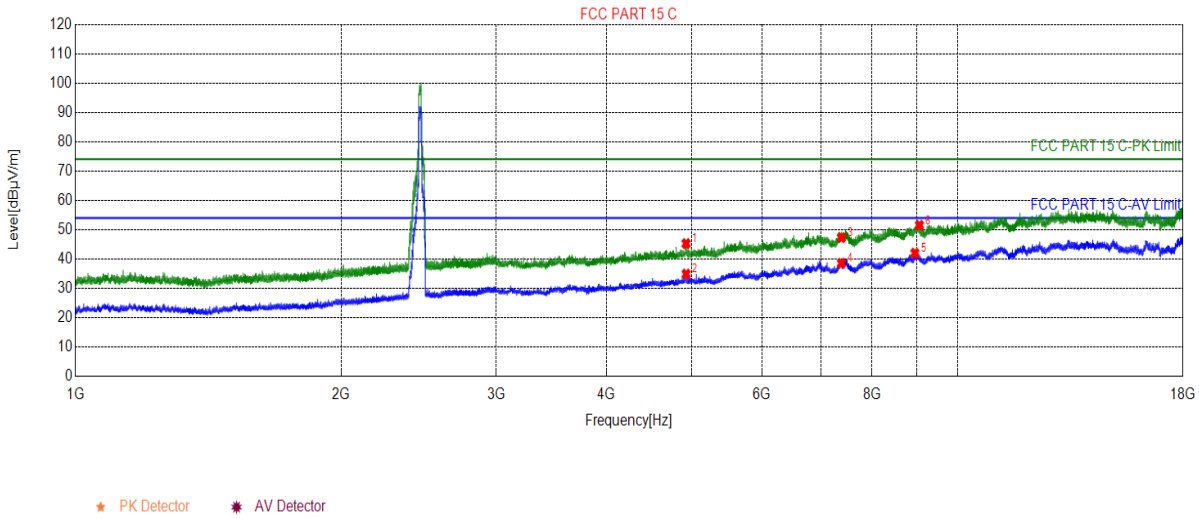
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11g _Channel 11

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 4924.00 | 45.25 | -14.74 | 74.00 | 28.75 | 174 | 95 | Horizontal |
| 2 | 4924.00 | 34.87 | -14.74 | 54.00 | 19.13 | 185 | 95 | Horizontal |
| 3 | 7386.00 | 47.32 | -7.78 | 74.00 | 26.68 | 196 | 217 | Horizontal |
| 4 | 7386.00 | 38.54 | -7.78 | 54.00 | 15.46 | 321 | 302 | Horizontal |
| 5 | 8948.03 | 41.99 | -4.18 | 54.00 | 12.01 | 261 | 95 | Horizontal |
| 6 | 9054.24 | 51.51 | -3.91 | 74.00 | 22.49 | 284 | 215 | Horizontal |

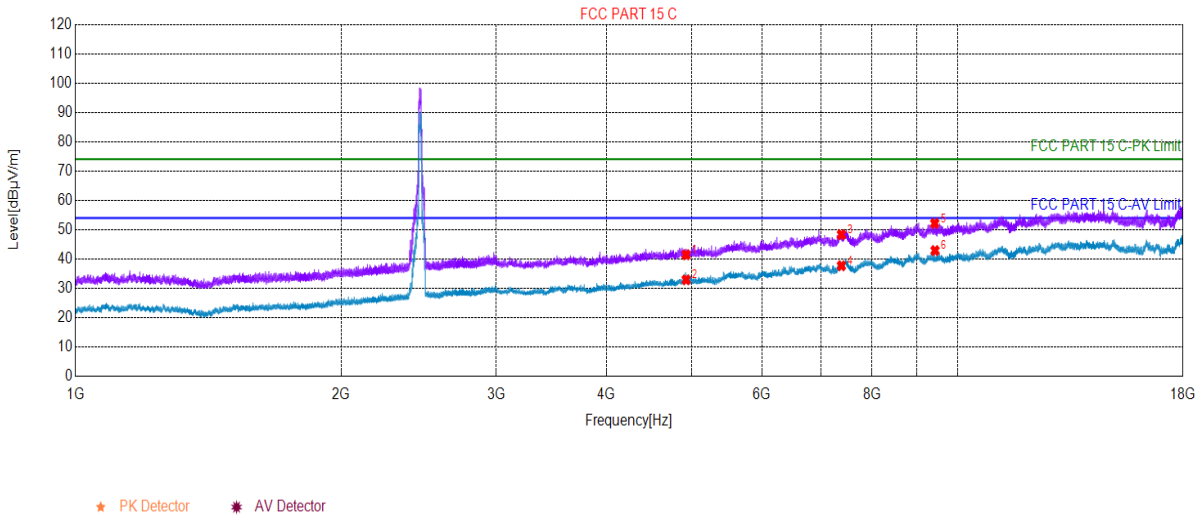
### Final Data List



SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd. Wireless Laboratory
1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086
t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11g _Channel 11

### Test Graph



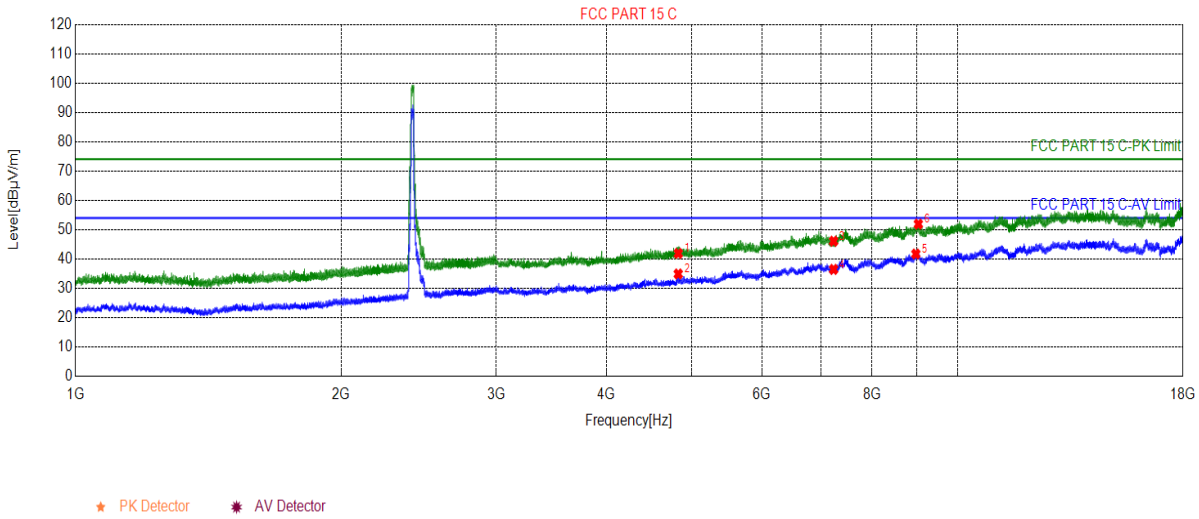

### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 4924.00 | 41.45 | -14.74 | 74.00 | 32.55 | 185 | 232 | Vertical |
| 2 | 4924.00 | 32.91 | -14.74 | 54.00 | 21.09 | 196 | 187 | Vertical |
| 3 | 7386.00 | 48.31 | -7.78 | 74.00 | 25.69 | 213 | 2 | Vertical |
| 4 | 7386.00 | 37.69 | -7.78 | 54.00 | 16.31 | 226 | 30 | Vertical |
| 5 | 9422.65 | 52.14 | -3.24 | 74.00 | 21.86 | 274 | 261 | Vertical |
| 6 | 9429.85 | 42.88 | -3.24 | 54.00 | 11.12 | 185 | 74 | Vertical |

### Final Data List

## 802.11n20_Channel 1

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 4824.00 | 41.90 | -15.31 | 74.00 | 32.10 | 185 | 49 | Horizontal |
| 2 | 4824.00 | 34.90 | -15.31 | 54.00 | 19.10 | 199 | 49 | Horizontal |
| 3 | 7236.00 | 46.07 | -8.82 | 74.00 | 27.93 | 213 | 233 | Horizontal |
| 4 | 7236.00 | 36.46 | -8.82 | 54.00 | 17.54 | 291 | 334 | Horizontal |
| 5 | 8969.03 | 41.71 | -3.96 | 54.00 | 12.29 | 215 | 192 | Horizontal |
| 6 | 9028.44 | 51.91 | -3.78 | 74.00 | 22.09 | 194 | 334 | Horizontal |

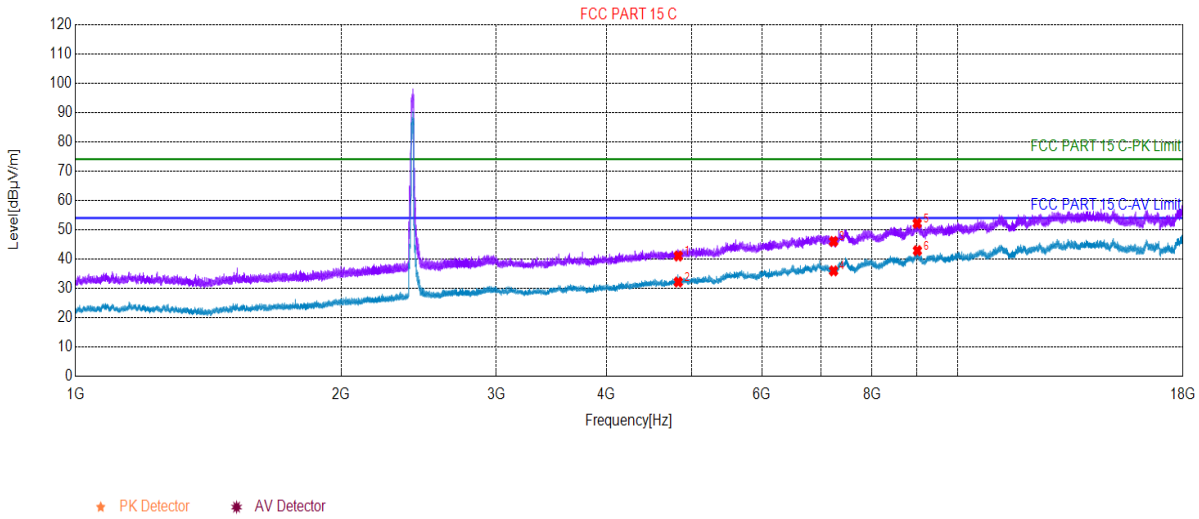
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11n20_Channel 1

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 4824.00 | 41.02 | -15.31 | 74.00 | 32.98 | 174 | 192 | Vertical |
| 2 | 4824.00 | 32.16 | -15.31 | 54.00 | 21.84 | 185 | 291 | Vertical |
| 3 | 7236.00 | 45.99 | -8.82 | 74.00 | 28.01 | 196 | 174 | Vertical |
| 4 | 7236.00 | 35.95 | -8.82 | 54.00 | 18.05 | 231 | 48 | Vertical |
| 5 | 9000.24 | 52.13 | -3.66 | 74.00 | 21.87 | 226 | 164 | Vertical |
| 6 | 9006.24 | 42.85 | -3.69 | 54.00 | 11.15 | 174 | 174 | Vertical |

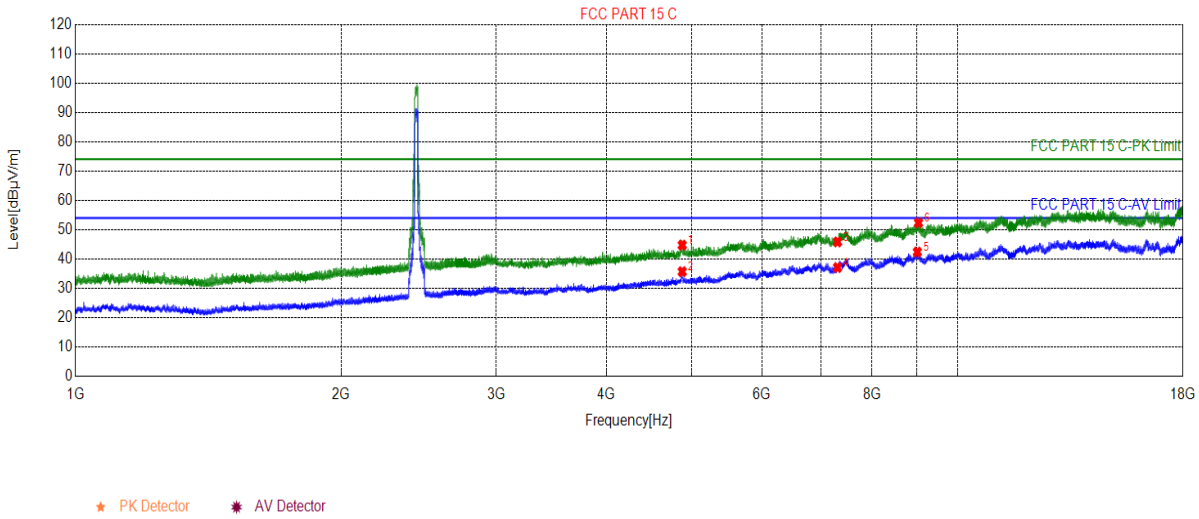
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11n20_Channel 6

### Test Graph



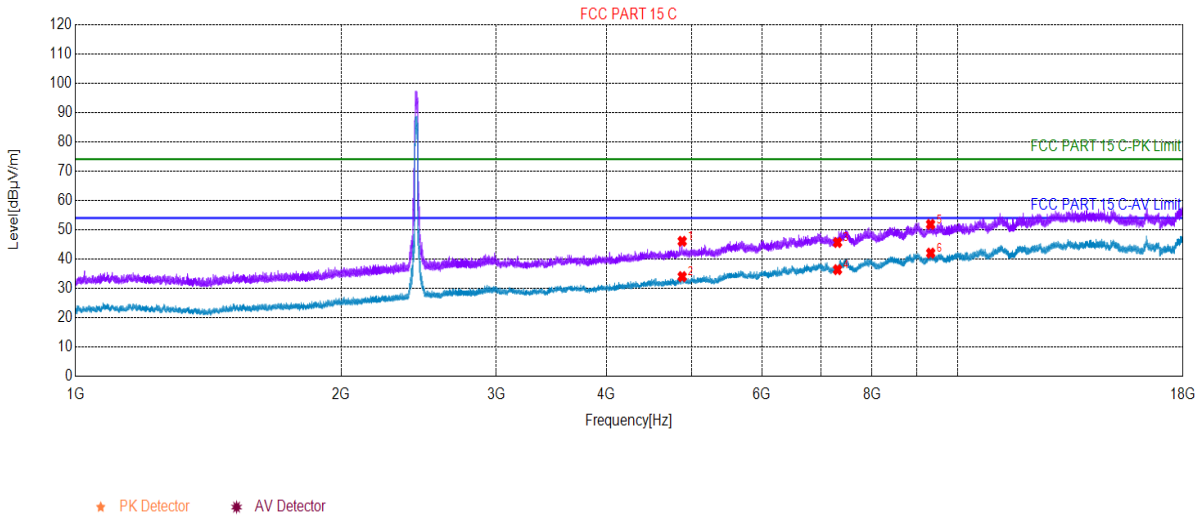

### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 4874.00 | 44.72 | -15.09 | 74.00 | 29.28 | 174 | 305 | Horizontal |
| 2 | 4874.00 | 35.68 | -15.09 | 54.00 | 18.32 | 185 | 305 | Horizontal |
| 3 | 7311.00 | 45.85 | -8.93 | 74.00 | 28.15 | 196 | 347 | Horizontal |
| 4 | 7311.00 | 37.09 | -8.93 | 54.00 | 16.91 | 213 | 358 | Horizontal |
| 5 | 9005.04 | 42.38 | -3.68 | 54.00 | 11.62 | 261 | 219 | Horizontal |
| 6 | 9032.04 | 52.30 | -3.79 | 74.00 | 21.70 | 174 | 69 | Horizontal |

### Final Data List

## 802.11n20_Channel 6

### Test Graph



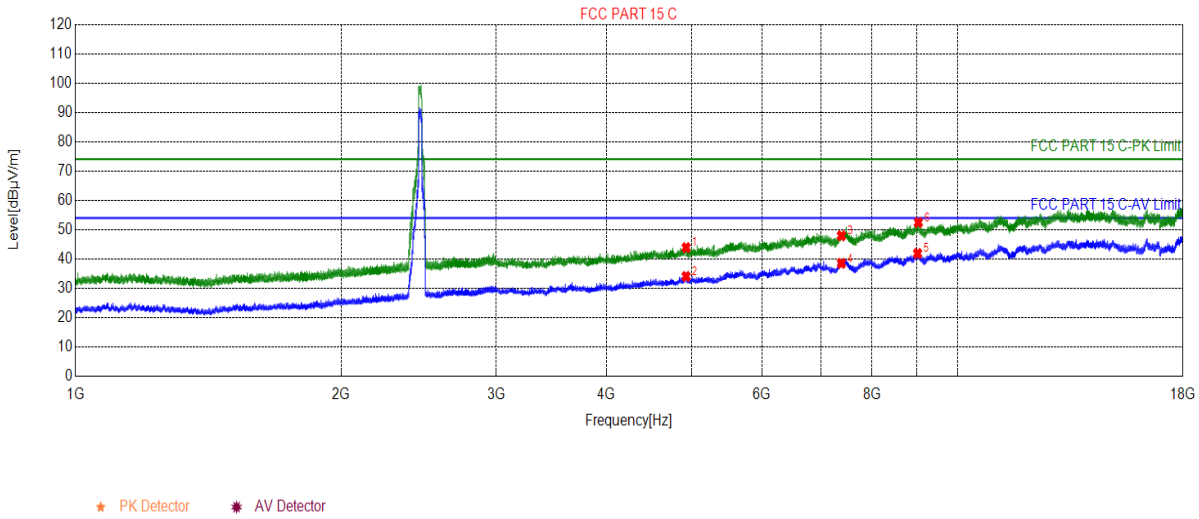

### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 4874.00 | 46.04 | -15.09 | 74.00 | 27.96 | 174 | 191 | Vertical |
| 2 | 4874.00 | 33.98 | -15.09 | 54.00 | 20.02 | 184 | 191 | Vertical |
| 3 | 7311.00 | 45.63 | -8.93 | 74.00 | 28.37 | 189 | 2 | Vertical |
| 4 | 7311.00 | 36.37 | -8.93 | 54.00 | 17.63 | 216 | 103 | Vertical |
| 5 | 9320.65 | 51.81 | -3.76 | 74.00 | 22.19 | 261 | 348 | Vertical |
| 6 | 9323.65 | 42.01 | -3.74 | 54.00 | 11.99 | 274 | 276 | Vertical |

### Final Data List

## 802.11n20_Channel 11

### Test Graph



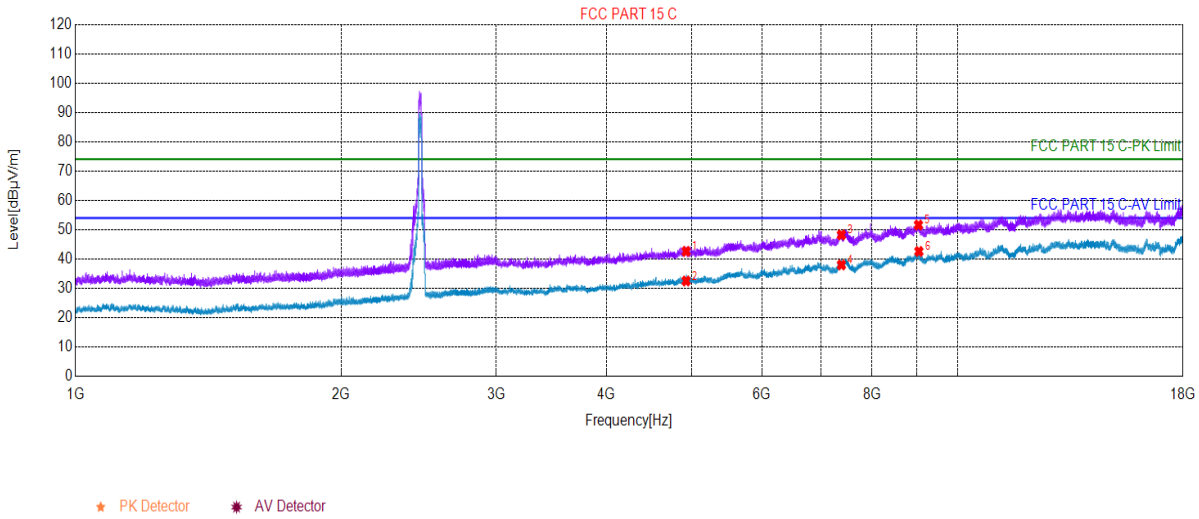

### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 4924.00 | 43.87 | -14.74 | 74.00 | 30.13 | 174 | 218 | Horizontal |
| 2 | 4924.00 | 34.05 | -14.74 | 54.00 | 19.95 | 185 | 291 | Horizontal |
| 3 | 7386.00 | 47.92 | -7.78 | 74.00 | 26.08 | 231 | 46 | Horizontal |
| 4 | 7386.00 | 38.51 | -7.78 | 54.00 | 15.49 | 261 | 131 | Horizontal |
| 5 | 9009.84 | 41.89 | -3.70 | 54.00 | 12.11 | 291 | 348 | Horizontal |
| 6 | 9029.04 | 52.45 | -3.78 | 74.00 | 21.55 | 254 | 16 | Horizontal |

### Final Data List

## 802.11n20_Channel 11

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 4924.00 | 42.61 | -14.74 | 74.00 | 31.39 | 174 | 188 | Vertical |
| 2 | 4924.00 | 32.51 | -14.74 | 54.00 | 21.49 | 185 | 30 | Vertical |
| 3 | 7386.00 | 48.22 | -7.78 | 74.00 | 25.78 | 191 | 304 | Vertical |
| 4 | 7386.00 | 37.97 | -7.78 | 54.00 | 16.03 | 236 | 46 | Vertical |
| 5 | 9030.84 | 51.58 | -3.79 | 74.00 | 22.42 | 291 | 45 | Vertical |
| 6 | 9041.64 | 42.58 | -3.83 | 54.00 | 11.42 | 247 | 160 | Vertical |

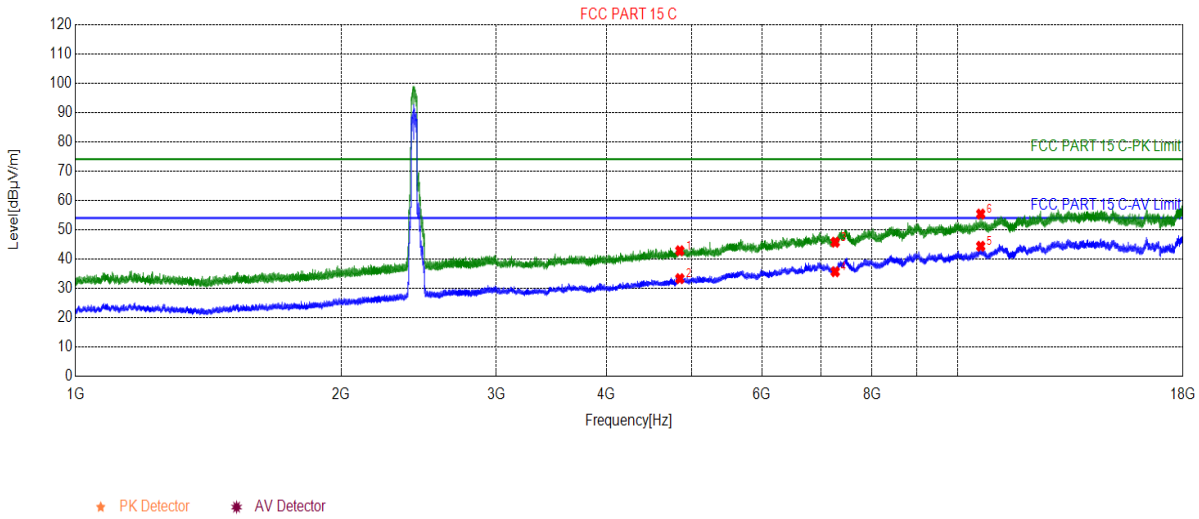
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11n40_Channel 3

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 4844.00 | 42.81 | -15.21 | 74.00 | 31.19 | 174 | 237 | Horizontal |
| 2 | 4844.00 | 33.31 | -15.21 | 54.00 | 20.69 | 185 | 45 | Horizontal |
| 3 | 7266.00 | 45.73 | -9.04 | 74.00 | 28.27 | 196 | 237 | Horizontal |
| 4 | 7266.00 | 35.66 | -9.04 | 54.00 | 18.34 | 213 | 237 | Horizontal |
| 5 | 10623.9 | 44.35 | -1.59 | 54.00 | 9.65 | 261 | 165 | Horizontal |
| 6 | 10624.5 | 55.34 | -1.59 | 74.00 | 18.66 | 284 | 88 | Horizontal |

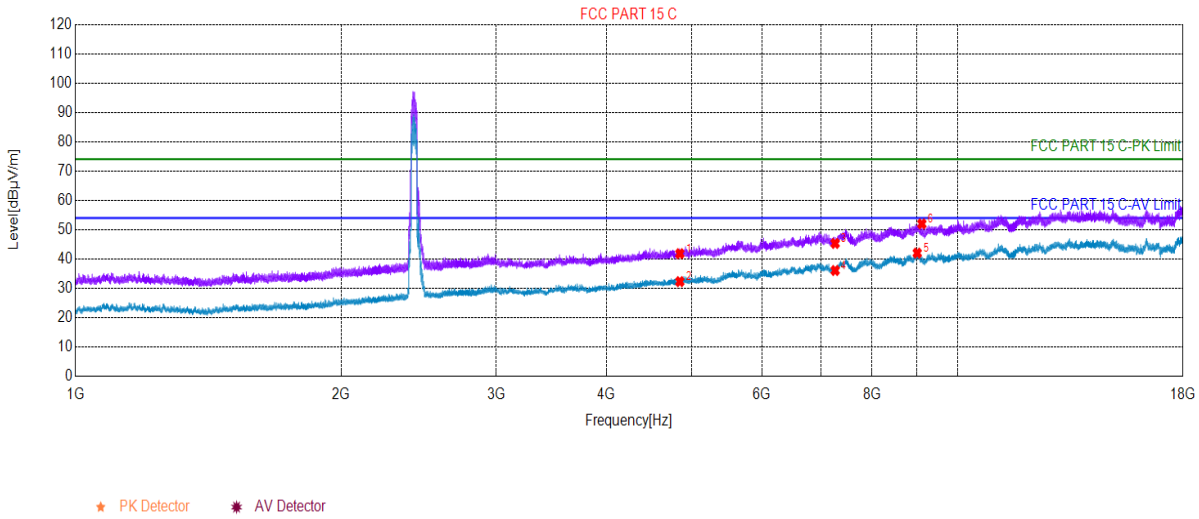
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11n40_Channel 3

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 4844.00 | 41.82 | -15.21 | 74.00 | 32.18 | 185 | 320 | Vertical |
| 2 | 4844.00 | 32.29 | -15.21 | 54.00 | 21.71 | 196 | 218 | Vertical |
| 3 | 7266.00 | 45.32 | -9.04 | 74.00 | 28.68 | 321 | 2 | Vertical |
| 4 | 7266.00 | 36.08 | -9.04 | 54.00 | 17.92 | 261 | 219 | Vertical |
| 5 | 9002.04 | 42.02 | -3.67 | 54.00 | 11.98 | 248 | 102 | Vertical |
| 6 | 9111.24 | 51.98 | -4.37 | 74.00 | 22.02 | 284 | 160 | Vertical |

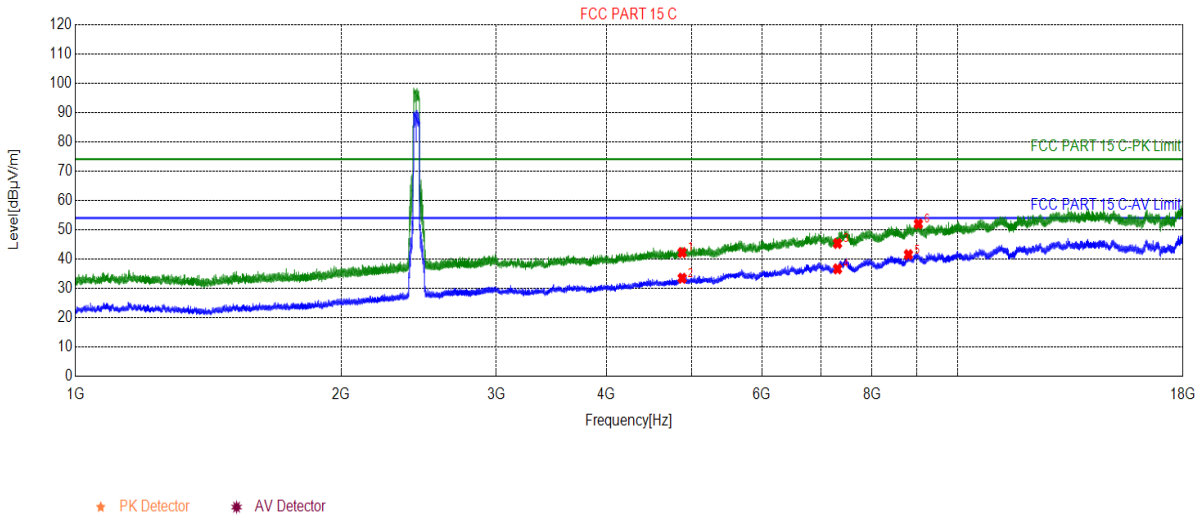
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11n40_Channel 6

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 4874.00 | 42.20 | -15.09 | 74.00 | 31.80 | 174 | 204 | Horizontal |
| 2 | 4874.00 | 33.44 | -15.09 | 54.00 | 20.56 | 185 | 104 | Horizontal |
| 3 | 7311.00 | 45.30 | -8.93 | 74.00 | 28.70 | 123 | 220 | Horizontal |
| 4 | 7311.00 | 36.63 | -8.93 | 54.00 | 17.37 | 269 | 358 | Horizontal |
| 5 | 8797.43 | 41.50 | -4.40 | 54.00 | 12.50 | 291 | 234 | Horizontal |
| 6 | 9028.44 | 51.97 | -3.78 | 74.00 | 22.03 | 164 | 166 | Horizontal |

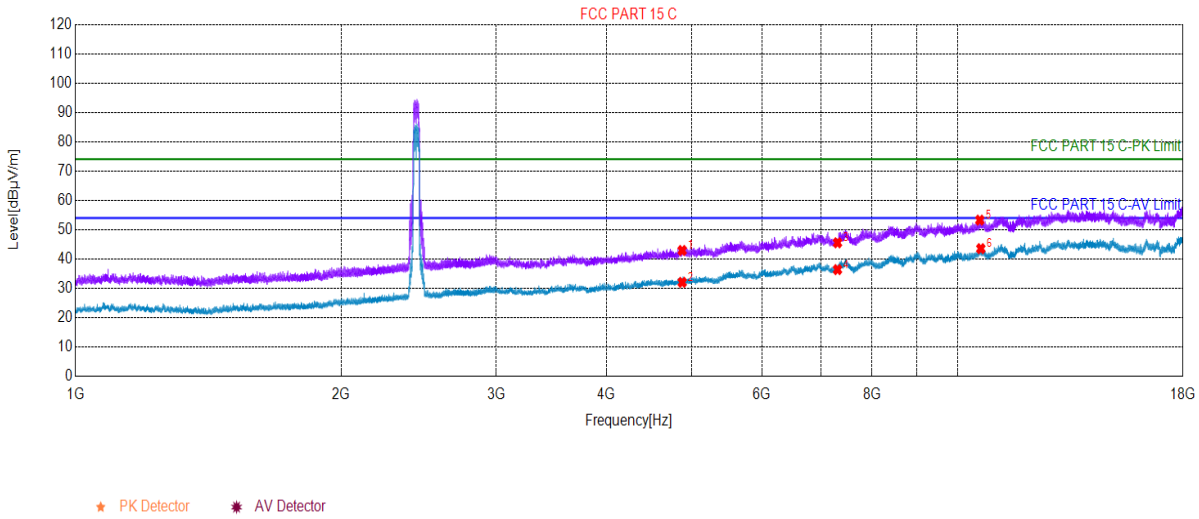
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11n40_Channel 6

### Test Graph



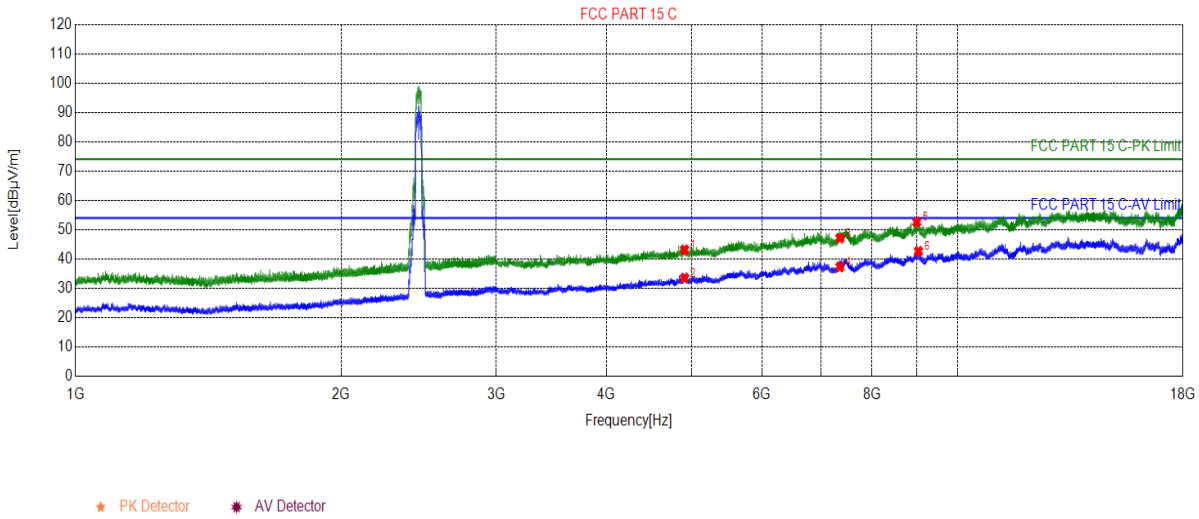

### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 4874.00 | 42.91 | -15.09 | 74.00 | 31.09 | 185 | 277 | Vertical |
| 2 | 4874.00 | 32.04 | -15.09 | 54.00 | 21.96 | 196 | 261 | Vertical |
| 3 | 7311.00 | 45.53 | -8.93 | 74.00 | 28.47 | 231 | 231 | Vertical |
| 4 | 7311.00 | 36.38 | -8.93 | 54.00 | 17.62 | 261 | 203 | Vertical |
| 5 | 10599.3 | 53.26 | -1.59 | 74.00 | 20.74 | 274 | 218 | Vertical |
| 6 | 10627.5 | 43.53 | -1.59 | 54.00 | 10.47 | 125 | 130 | Vertical |

### Final Data List

## 802.11n40_Channel 9

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 4904.00 | 43.12 | -14.95 | 74.00 | 30.88 | 182 | 293 | Horizontal |
| 2 | 4904.00 | 33.50 | -14.95 | 54.00 | 20.50 | 261 | 281 | Horizontal |
| 3 | 7356.00 | 47.12 | -7.68 | 74.00 | 26.88 | 196 | 251 | Horizontal |
| 4 | 7356.00 | 37.32 | -7.68 | 54.00 | 16.68 | 321 | 56 | Horizontal |
| 5 | 8990.03 | 52.59 | -3.76 | 74.00 | 21.41 | 261 | 279 | Horizontal |
| 6 | 9029.64 | 42.62 | -3.78 | 54.00 | 11.38 | 241 | 225 | Horizontal |

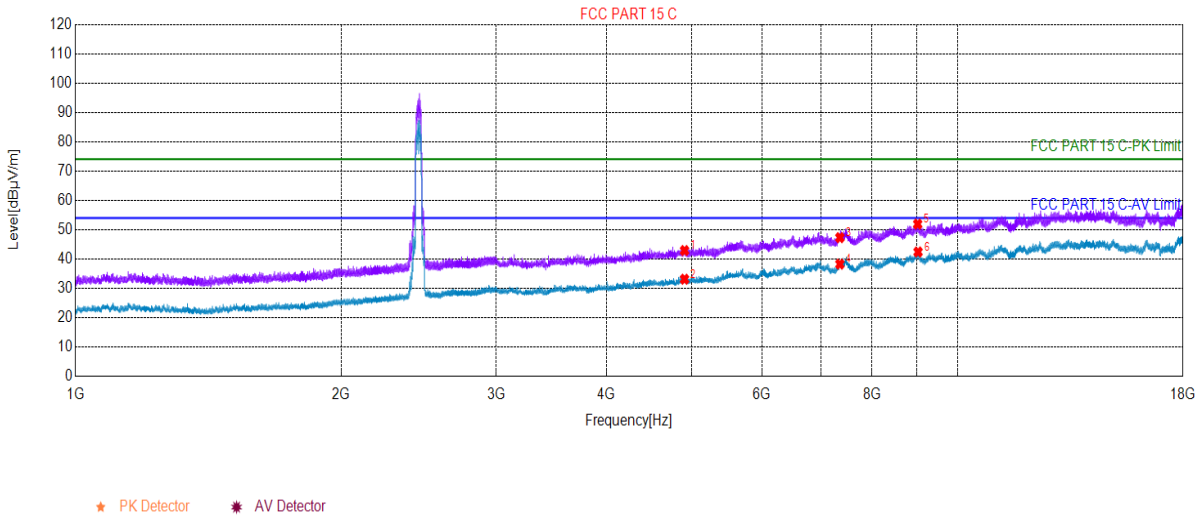
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11n40_Channel 9

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 4904.00 | 42.89 | -14.95 | 74.00 | 31.11 | 174 | 8 | Vertical |
| 2 | 4904.00 | 33.11 | -14.95 | 54.00 | 20.89 | 185 | 187 | Vertical |
| 3 | 7356.00 | 47.28 | -7.68 | 74.00 | 26.72 | 196 | 14 | Vertical |
| 4 | 7356.00 | 38.25 | -7.68 | 54.00 | 15.75 | 261 | 334 | Vertical |
| 5 | 9012.84 | 51.90 | -3.71 | 74.00 | 22.10 | 242 | 14 | Vertical |
| 6 | 9021.24 | 42.40 | -3.75 | 54.00 | 11.60 | 284 | 2 | Vertical |

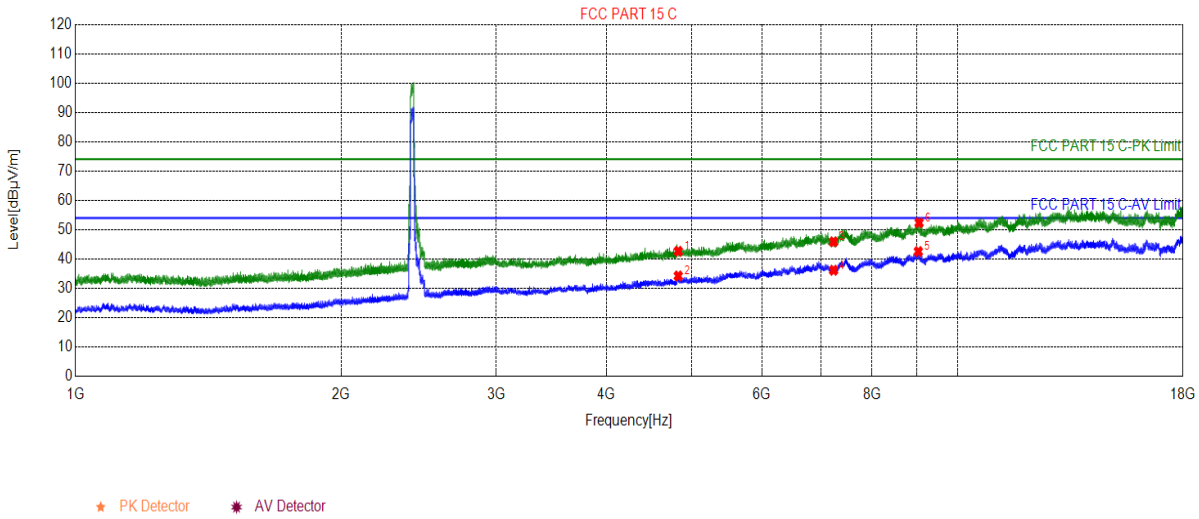
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11ax20_Channel 1

### Test Graph



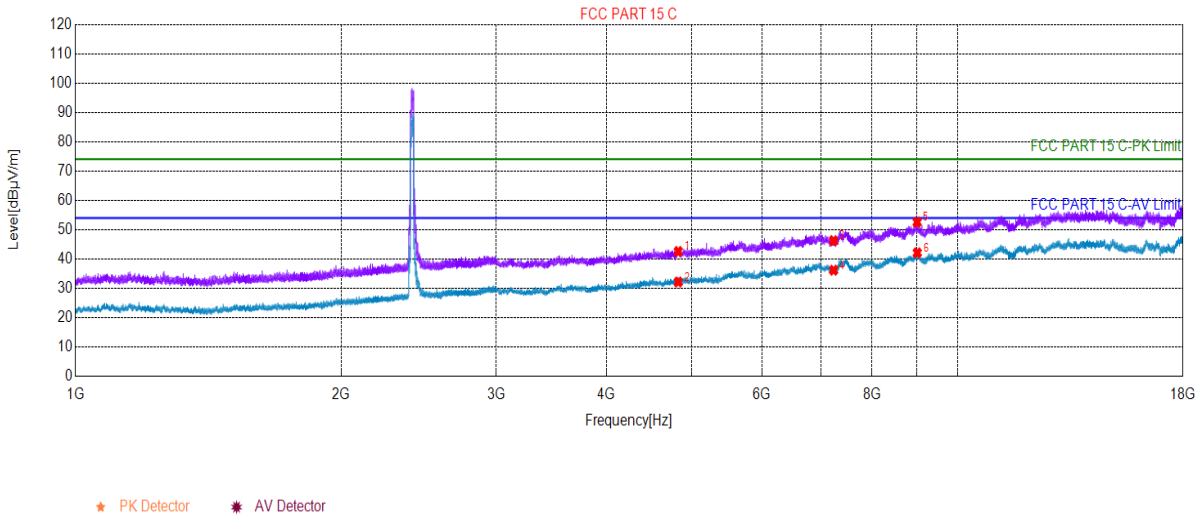

### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 4824.00 | 42.63 | -15.31 | 74.00 | 31.37 | 174 | 319 | Horizontal |
| 2 | 4824.00 | 34.22 | -15.31 | 54.00 | 19.78 | 185 | 89 | Horizontal |
| 3 | 7236.00 | 45.87 | -8.82 | 74.00 | 28.13 | 199 | 218 | Horizontal |
| 4 | 7236.00 | 36.17 | -8.82 | 54.00 | 17.83 | 232 | 3 | Horizontal |
| 5 | 9027.84 | 42.55 | -3.78 | 54.00 | 11.45 | 267 | 233 | Horizontal |
| 6 | 9045.84 | 52.35 | -3.85 | 74.00 | 21.65 | 148 | 176 | Horizontal |

### Final Data List

## 802.11ax 20_Channel 1

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 4824.00 | 42.59 | -15.31 | 74.00 | 31.41 | 174 | 305 | Vertical |
| 2 | 4824.00 | 32.16 | -15.31 | 54.00 | 21.84 | 185 | 3 | Vertical |
| 3 | 7236.00 | 46.24 | -8.82 | 74.00 | 27.76 | 196 | 131 | Vertical |
| 4 | 7236.00 | 36.18 | -8.82 | 54.00 | 17.82 | 269 | 2 | Vertical |
| 5 | 8999.64 | 52.56 | -3.66 | 74.00 | 21.44 | 288 | 15 | Vertical |
| 6 | 9003.24 | 42.11 | -3.67 | 54.00 | 11.89 | 274 | 2 | Vertical |

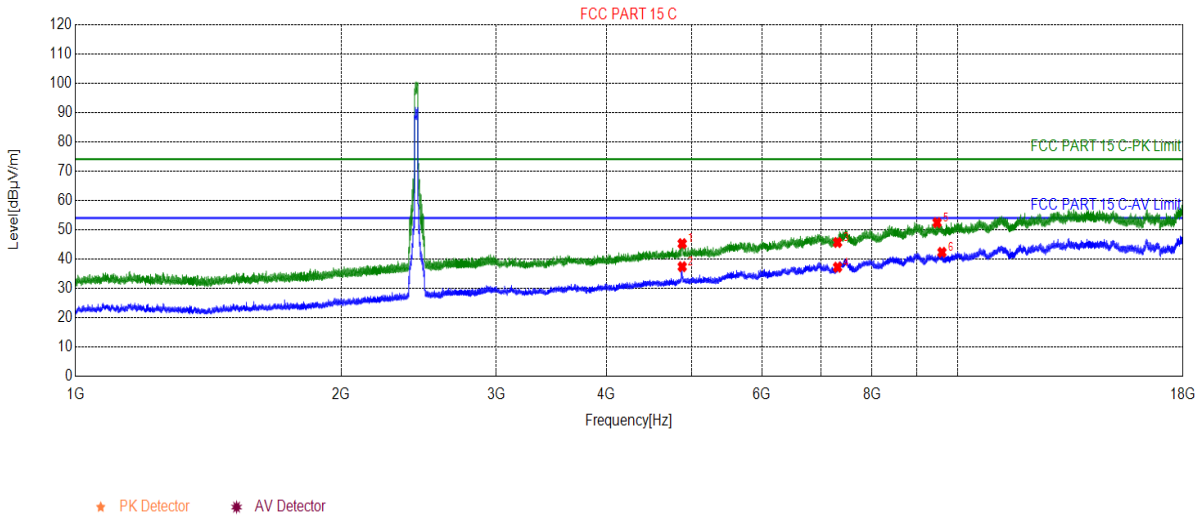
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11ax 20_Channel 6

### Test Graph



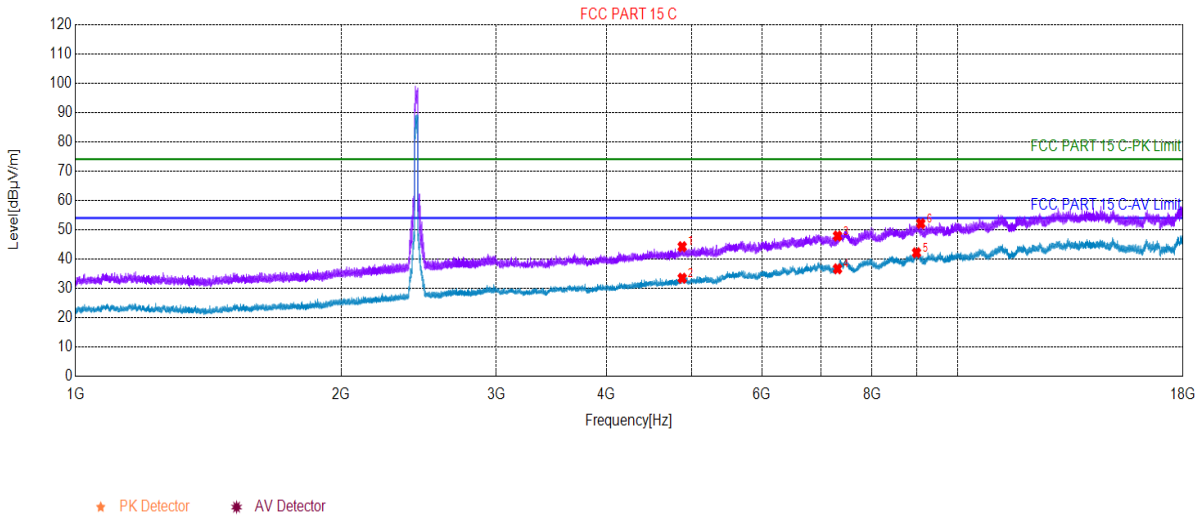

### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 4874.00 | 45.24 | -15.09 | 74.00 | 28.76 | 174 | 87 | Horizontal |
| 2 | 4874.00 | 37.37 | -15.09 | 54.00 | 16.63 | 185 | 101 | Horizontal |
| 3 | 7311.00 | 45.64 | -8.93 | 74.00 | 28.36 | 196 | 30 | Horizontal |
| 4 | 7311.00 | 37.19 | -8.93 | 54.00 | 16.81 | 231 | 87 | Horizontal |
| 5 | 9480.25 | 52.38 | -3.34 | 74.00 | 21.62 | 261 | 145 | Horizontal |
| 6 | 9602.06 | 42.26 | -2.97 | 54.00 | 11.74 | 274 | 261 | Horizontal |

### Final Data List

## 802.11ax 20_Channel 6

### Test Graph



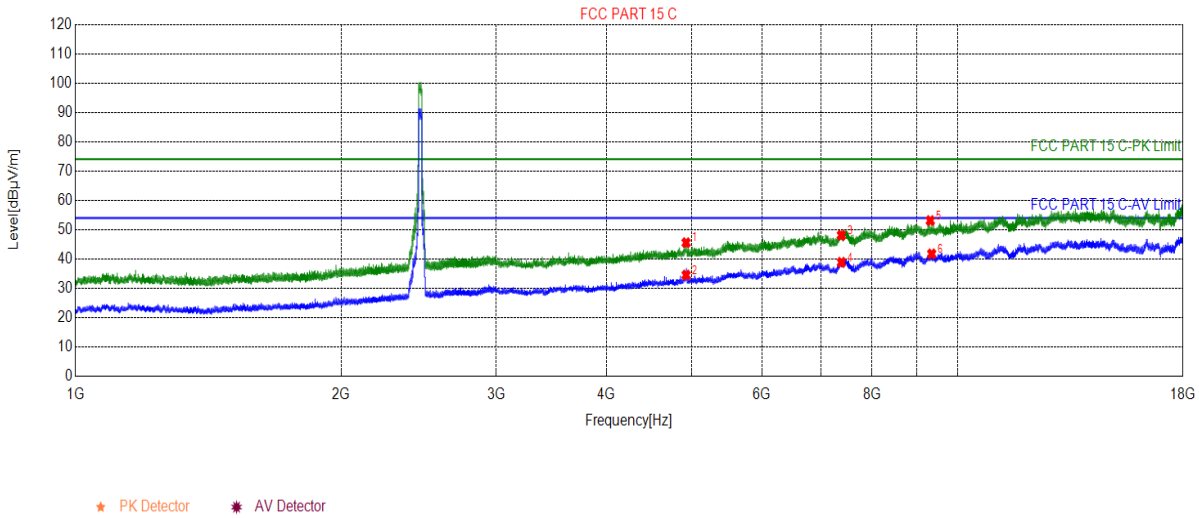

### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 4874.00 | 44.21 | -15.09 | 74.00 | 29.79 | 174 | 189 | Vertical |
| 2 | 4874.00 | 33.45 | -15.09 | 54.00 | 20.55 | 185 | 175 | Vertical |
| 3 | 7311.00 | 47.84 | -8.93 | 74.00 | 26.16 | 321 | 14 | Vertical |
| 4 | 7311.00 | 36.65 | -8.93 | 54.00 | 17.35 | 262 | 305 | Vertical |
| 5 | 8984.03 | 42.13 | -3.82 | 54.00 | 11.87 | 291 | 160 | Vertical |
| 6 | 9086.64 | 52.09 | -4.27 | 74.00 | 21.91 | 281 | 290 | Vertical |

### Final Data List

## 802.11ax 20_Channel 11

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 4924.00 | 45.55 | -14.74 | 74.00 | 28.45 | 174 | 72 | Horizontal |
| 2 | 4924.00 | 34.51 | -14.74 | 54.00 | 19.49 | 185 | 290 | Horizontal |
| 3 | 7386.00 | 48.08 | -7.78 | 74.00 | 25.92 | 196 | 58 | Horizontal |
| 4 | 7386.00 | 38.86 | -7.78 | 54.00 | 15.14 | 231 | 188 | Horizontal |
| 5 | 9312.85 | 53.09 | -3.82 | 74.00 | 20.91 | 262 | 88 | Horizontal |
| 6 | 9347.65 | 41.75 | -3.55 | 54.00 | 12.25 | 284 | 188 | Horizontal |

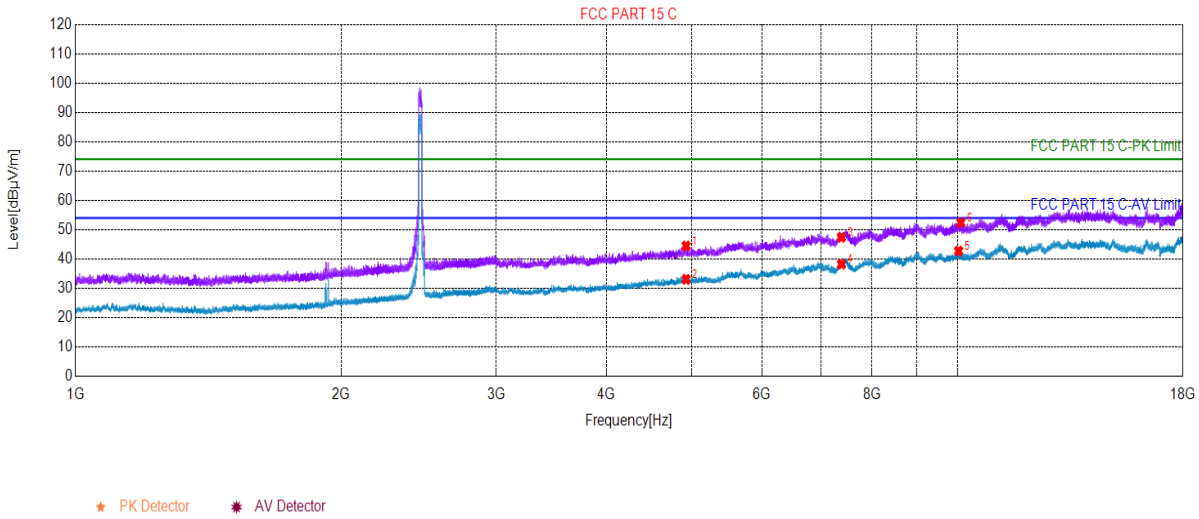
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11ax 20_Channel 11

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 4924.00 | 44.45 | -14.74 | 74.00 | 29.55 | 258 | 173 | Vertical |
| 2 | 4924.00 | 33.07 | -14.74 | 54.00 | 20.93 | 296 | 187 | Vertical |
| 3 | 7386.00 | 47.37 | -7.78 | 74.00 | 26.63 | 185 | 358 | Vertical |
| 4 | 7386.00 | 38.24 | -7.78 | 54.00 | 15.76 | 177 | 333 | Vertical |
| 5 | 10028.6 | 42.72 | -2.80 | 54.00 | 11.28 | 213 | 102 | Vertical |
| 6 | 10086.8 | 52.40 | -2.50 | 74.00 | 21.60 | 262 | 159 | Vertical |

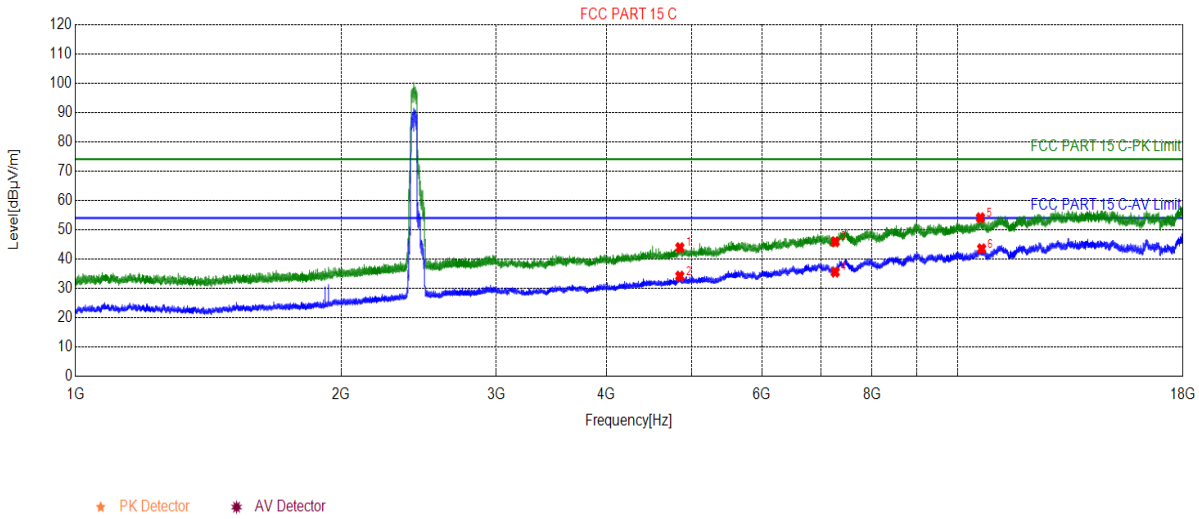
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086
t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11ax 40_Channel 3

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 4844.00 | 43.88 | -15.21 | 74.00 | 30.12 | 174 | 312 | Horizontal |
| 2 | 4844.00 | 34.16 | -15.21 | 54.00 | 19.84 | 185 | 66 | Horizontal |
| 3 | 7266.00 | 45.88 | -9.04 | 74.00 | 28.12 | 159 | 219 | Horizontal |
| 4 | 7266.00 | 35.54 | -9.04 | 54.00 | 18.46 | 291 | 125 | Horizontal |
| 5 | 10616.7 | 54.06 | -1.59 | 74.00 | 19.94 | 231 | 111 | Horizontal |
| 6 | 10649.7 | 43.48 | -1.58 | 54.00 | 10.52 | 261 | 60 | Horizontal |

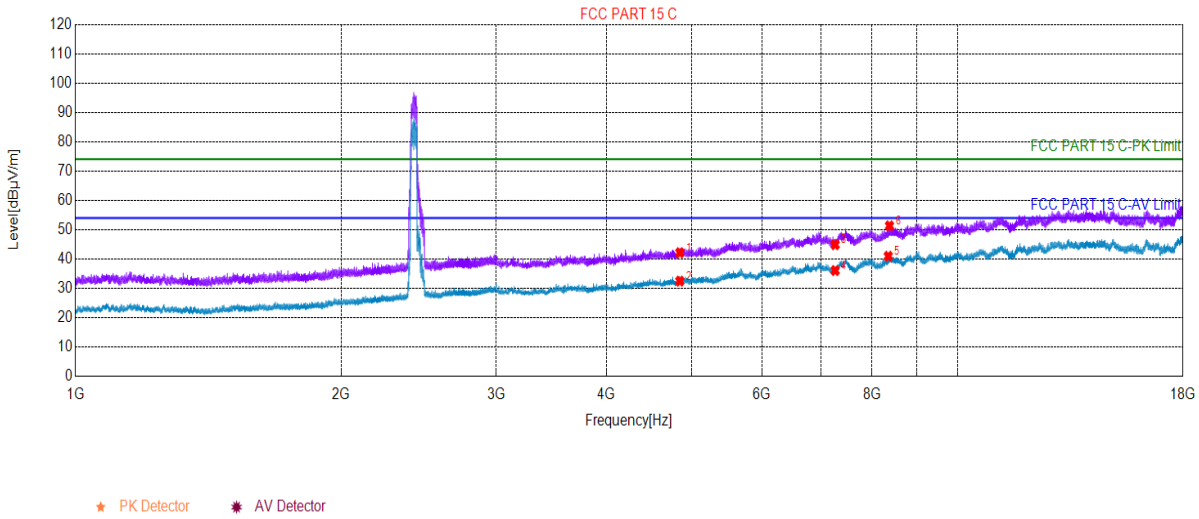
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11ax 40_Channel 3

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 4844.00 | 42.15 | -15.21 | 74.00 | 31.85 | 174 | 304 | Vertical |
| 2 | 4844.00 | 32.46 | -15.21 | 54.00 | 21.54 | 185 | 195 | Vertical |
| 3 | 7266.00 | 44.87 | -9.04 | 74.00 | 29.13 | 322 | 108 | Vertical |
| 4 | 7266.00 | 36.06 | -9.04 | 54.00 | 17.94 | 264 | 233 | Vertical |
| 5 | 8346.81 | 40.93 | -6.02 | 54.00 | 13.07 | 291 | 145 | Vertical |
| 6 | 8373.21 | 51.30 | -5.88 | 74.00 | 22.70 | 241 | 247 | Vertical |

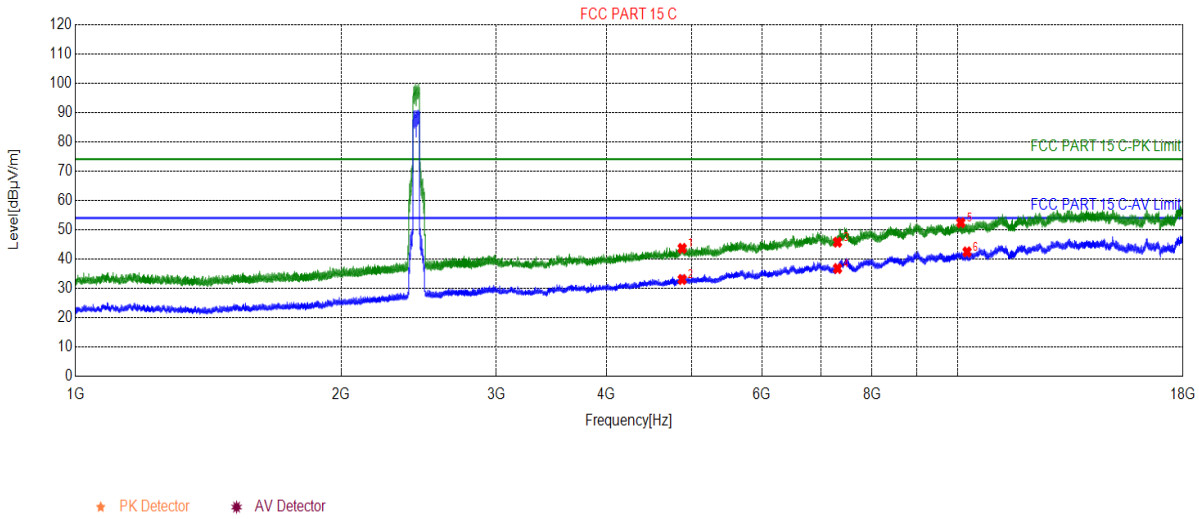
### Final Data List



SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd. Wireless Laboratory
1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086
t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11ax 40_Channel 6

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 4874.00 | 43.63 | -15.09 | 74.00 | 30.37 | 174 | 304 | Horizontal |
| 2 | 4874.00 | 33.02 | -15.09 | 54.00 | 20.98 | 185 | 304 | Horizontal |
| 3 | 7311.00 | 45.75 | -8.93 | 74.00 | 28.25 | 196 | 304 | Horizontal |
| 4 | 7311.00 | 36.76 | -8.93 | 54.00 | 17.24 | 321 | 358 | Horizontal |
| 5 | 10086.8 | 52.38 | -2.50 | 74.00 | 21.62 | 262 | 217 | Horizontal |
| 6 | 10251.2 | 42.42 | -2.08 | 54.00 | 11.58 | 281 | 229 | Horizontal |

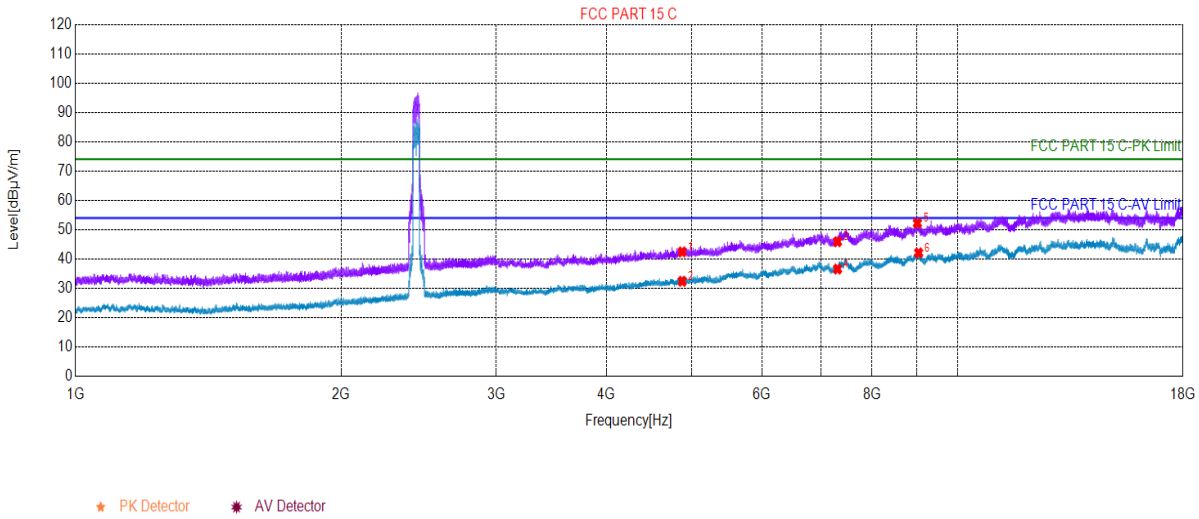
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11ax 40_Channel 6

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 4874.00 | 42.42 | -15.09 | 74.00 | 31.58 | 285 | 291 | Vertical |
| 2 | 4874.00 | 32.40 | -15.09 | 54.00 | 21.60 | 296 | 204 | Vertical |
| 3 | 7311.00 | 45.90 | -8.93 | 74.00 | 28.10 | 231 | 246 | Vertical |
| 4 | 7311.00 | 36.57 | -8.93 | 54.00 | 17.43 | 262 | 334 | Vertical |
| 5 | 9005.64 | 52.22 | -3.68 | 74.00 | 21.78 | 159 | 218 | Vertical |
| 6 | 9035.04 | 42.10 | -3.81 | 54.00 | 11.90 | 184 | 334 | Vertical |

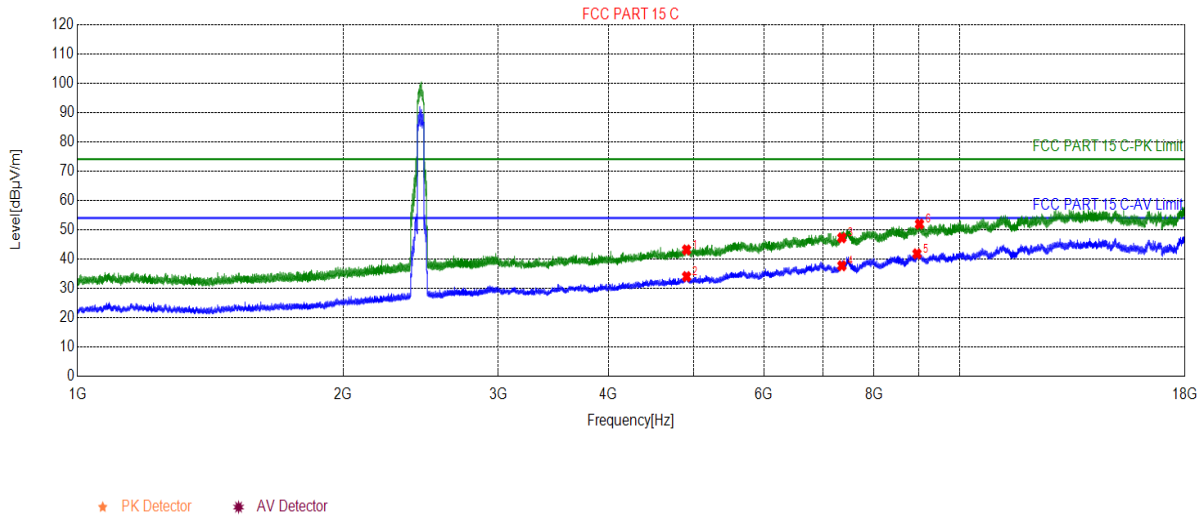
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11ax 40_Channel 9

### Test Graph



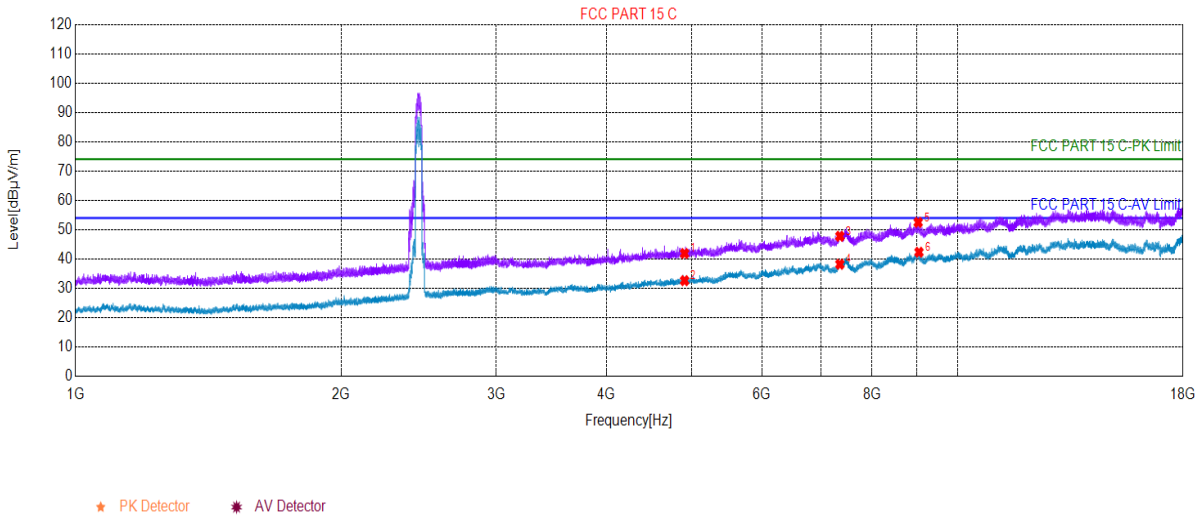

### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 4904.00 | 43.10 | -14.95 | 74.00 | 30.90 | 174 | 334 | Horizontal |
| 2 | 4904.00 | 33.99 | -14.95 | 54.00 | 20.01 | 185 | 305 | Horizontal |
| 3 | 7356.00 | 47.23 | -7.68 | 74.00 | 26.77 | 196 | 262 | Horizontal |
| 4 | 7356.00 | 37.69 | -7.68 | 54.00 | 16.31 | 231 | 72 | Horizontal |
| 5 | 8949.23 | 41.77 | -4.16 | 54.00 | 12.23 | 261 | 247 | Horizontal |
| 6 | 9007.44 | 51.90 | -3.69 | 74.00 | 22.10 | 281 | 57 | Horizontal |

### Final Data List

## 802.11ax 40_Channel 9

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 4904.00 | 41.88 | -14.95 | 74.00 | 32.12 | 174 | 29 | Vertical |
| 2 | 4904.00 | 32.62 | -14.95 | 54.00 | 21.38 | 185 | 160 | Vertical |
| 3 | 7356.00 | 47.76 | -7.68 | 74.00 | 26.24 | 196 | 44 | Vertical |
| 4 | 7356.00 | 38.21 | -7.68 | 54.00 | 15.79 | 231 | 348 | Vertical |
| 5 | 9024.24 | 52.48 | -3.76 | 74.00 | 21.52 | 262 | 176 | Vertical |
| 6 | 9043.44 | 42.32 | -3.84 | 54.00 | 11.68 | 181 | 117 | Vertical |

### Final Data List

Remark:

1) The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:

Factor= Antenna Factor + Cable Factor – Preamplifier Factor

Final Test Level =Receiver Reading + Factor

2) Scan from 9kHz to 25GHz, the disturbance between 9KHz to 30MHz and 18GHz to 25GHz was very low, and the above harmonics were the highest point could be found when testing, The amplitude of spurious emissions from the radiator which are attenuated more than 20dB below the limit need not be reported.

3）As shown in this section, for frequencies above 1GHz, the field strength limits are based on average limits. However, the peak field strength of any emission shall not exceed the maximum permitted average limits specified above by more than 20 dB under any condition of modulation. So, only the peak measurements were shown in the report.

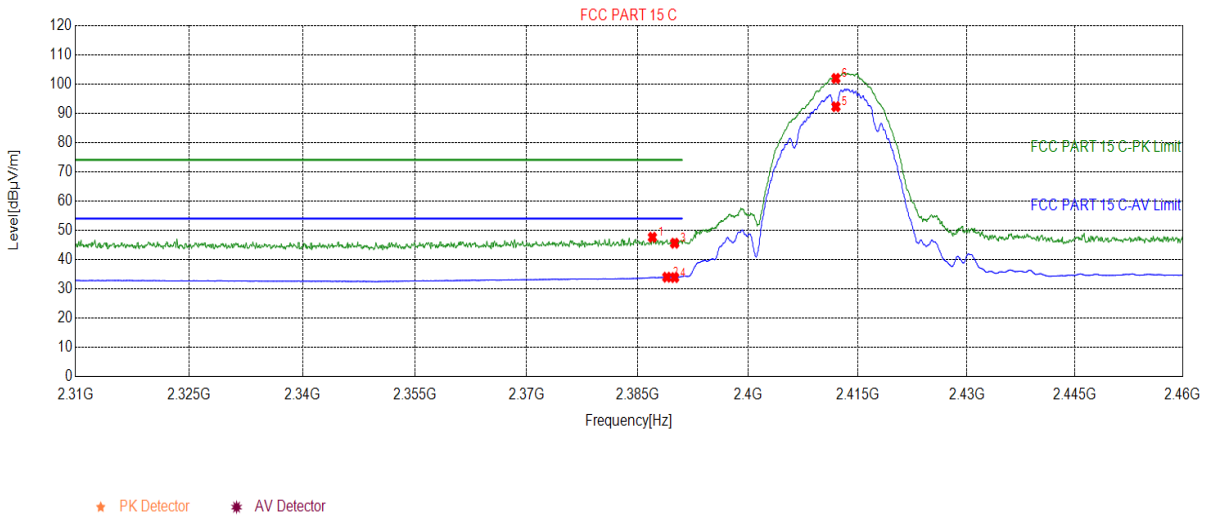
4）All Modes have been tested, but only the worst case data displayed in this report.

# Restricted bands around fundamental frequency

**MIMO(Worst case):**

**802.11b_Channel 1**

**Test Graph**




**Suspected List**

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 2386.98 | 47.59 | 9.52 | 74.00 | 26.41 | 189 | 15 | Horizontal |
| 2 | 2388.93 | 33.95 | 9.57 | 54.00 | 20.05 | 156 | 216 | Horizontal |
| 3 | 2390.00 | 45.55 | 9.60 | 74.00 | 28.45 | 211 | 42 | Horizontal |
| 4 | 2390.00 | 33.83 | 9.60 | 54.00 | 20.17 | 241 | 21 | Horizontal |
| 5 | 2412.00 | 92.21 | 9.85 | 0.00 | -92.21 | 321 | 156 | Horizontal |
| 6 | 2412.00 | 101.86 | 9.85 | 0.00 | -101.86 | 247 | 164 | Horizontal |

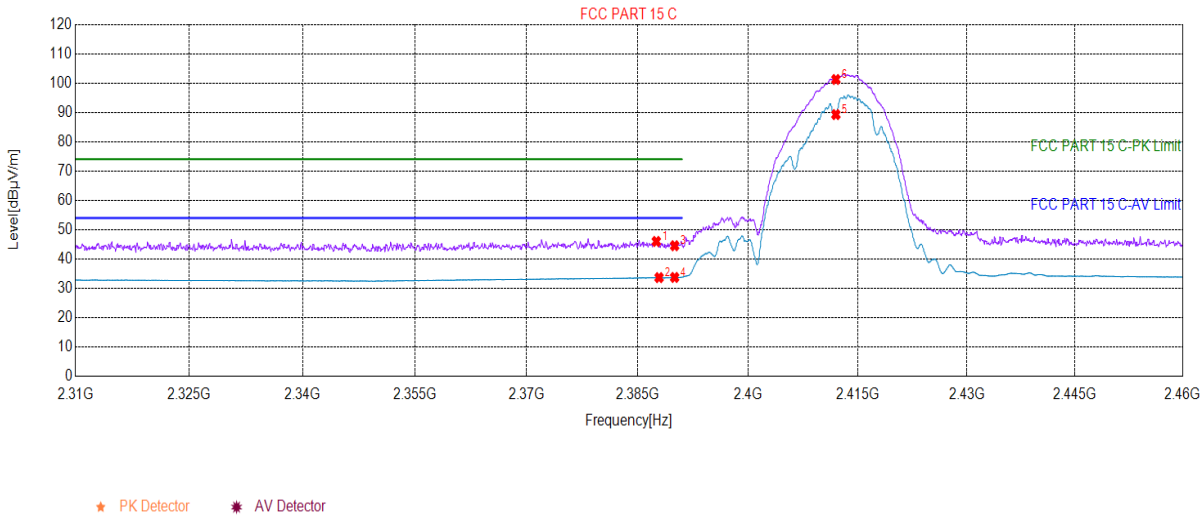
**Final Data List**



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086
t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11 b _Channel 1

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 2387.51 | 45.99 | 9.54 | 74.00 | 28.01 | 173 | 92 | Vertical |
| 2 | 2387.88 | 33.65 | 9.55 | 54.00 | 20.35 | 184 | 145 | Vertical |
| 3 | 2390.00 | 44.53 | 9.60 | 74.00 | 29.47 | 196 | 54 | Vertical |
| 4 | 2390.00 | 33.71 | 9.60 | 54.00 | 20.29 | 158 | 213 | Vertical |
| 5 | 2412.00 | 89.24 | 9.85 | 0.00 | -89.24 | 213 | 218 | Vertical |
| 6 | 2412.00 | 101.22 | 9.85 | 0.00 | -101.22 | 159 | 54 | Vertical |

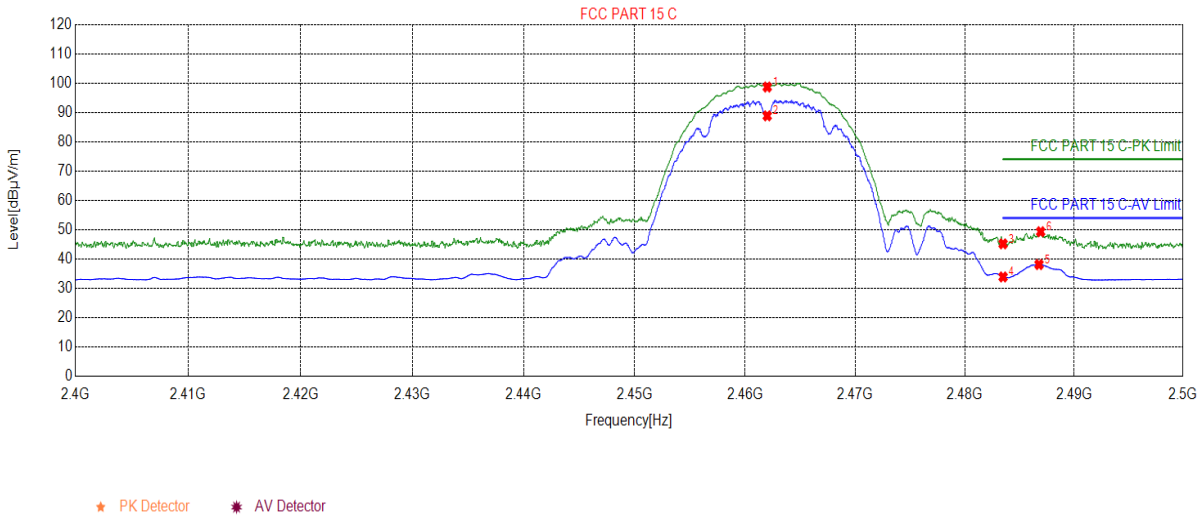
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11b _Channel 11

### Test Graph



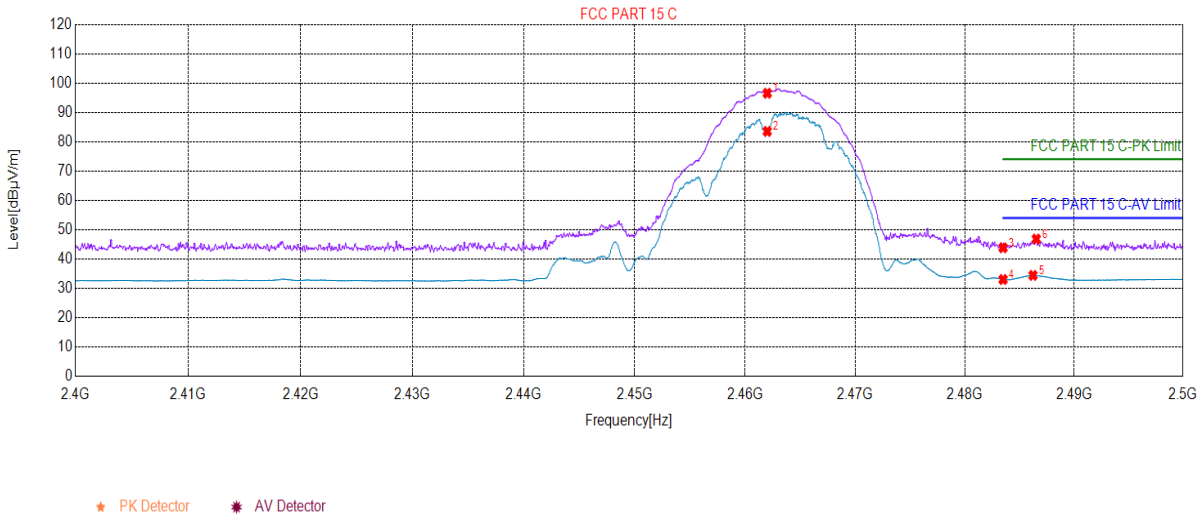

### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 2462.00 | 98.65 | 8.25 | 0.00 | -98.65 | 159 | 21 | Horizontal |
| 2 | 2462.00 | 88.81 | 8.25 | 0.00 | -88.81 | 185 | 347 | Horizontal |
| 3 | 2483.50 | 45.17 | 8.48 | 74.00 | 28.83 | 196 | 61 | Horizontal |
| 4 | 2483.50 | 33.88 | 8.48 | 54.00 | 20.12 | 213 | 213 | Horizontal |
| 5 | 2486.79 | 38.10 | 8.49 | 54.00 | 15.90 | 216 | 159 | Horizontal |
| 6 | 2486.94 | 49.30 | 8.49 | 74.00 | 24.70 | 164 | 148 | Horizontal |

### Final Data List

## 802.11b _Channel 11

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 2462.00 | 96.52 | 8.25 | 0.00 | -96.52 | 215 | 151 | Vertical |
| 2 | 2462.00 | 83.52 | 8.25 | 0.00 | -83.52 | 247 | 21 | Vertical |
| 3 | 2483.50 | 43.84 | 8.48 | 74.00 | 30.16 | 258 | 51 | Vertical |
| 4 | 2483.50 | 33.01 | 8.48 | 54.00 | 20.99 | 213 | 65 | Vertical |
| 5 | 2486.24 | 34.41 | 8.49 | 54.00 | 19.59 | 196 | 354 | Vertical |
| 6 | 2486.54 | 46.81 | 8.49 | 74.00 | 27.19 | 159 | 212 | Vertical |

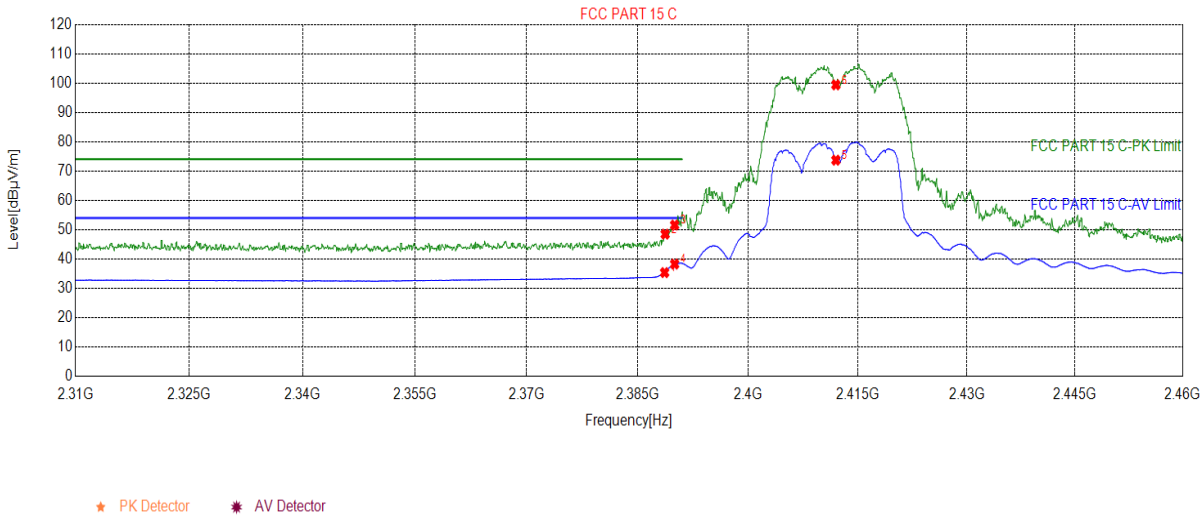
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11g_Channel 1

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 2388.63 | 35.36 | 9.57 | 54.00 | 18.64 | 159 | 15 | Horizontal |
| 2 | 2388.71 | 48.47 | 9.57 | 74.00 | 25.53 | 223 | 22 | Horizontal |
| 3 | 2390.00 | 51.57 | 9.60 | 74.00 | 22.43 | 156 | 134 | Horizontal |
| 4 | 2390.00 | 38.26 | 9.60 | 54.00 | 15.74 | 176 | 264 | Horizontal |
| 5 | 2412.00 | 73.70 | 9.85 | 0.00 | -73.70 | 162 | 235 | Horizontal |
| 6 | 2412.00 | 99.39 | 9.85 | 0.00 | -99.39 | 254 | 354 | Horizontal |

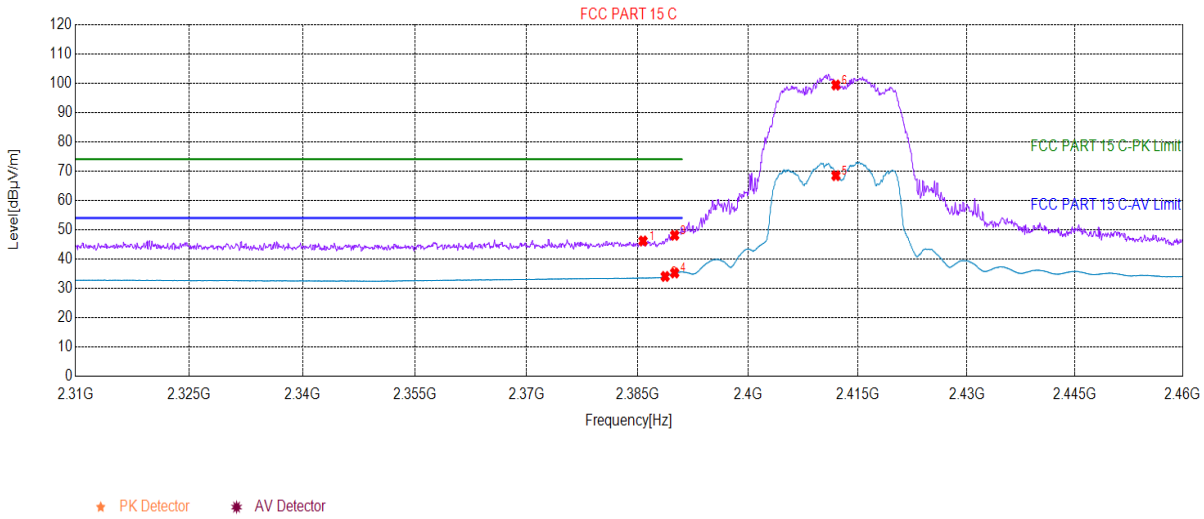
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11g _Channel 1

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 2385.71 | 46.15 | 9.49 | 74.00 | 27.85 | 159 | 15 | Vertical |
| 2 | 2388.71 | 34.05 | 9.57 | 54.00 | 19.95 | 196 | 225 | Vertical |
| 3 | 2390.00 | 48.08 | 9.60 | 74.00 | 25.92 | 174 | 213 | Vertical |
| 4 | 2390.00 | 35.23 | 9.60 | 54.00 | 18.77 | 213 | 216 | Vertical |
| 5 | 2412.00 | 68.43 | 9.85 | 0.00 | -68.43 | 252 | 48 | Vertical |
| 6 | 2412.00 | 99.34 | 9.85 | 0.00 | -99.34 | 184 | 314 | Vertical |

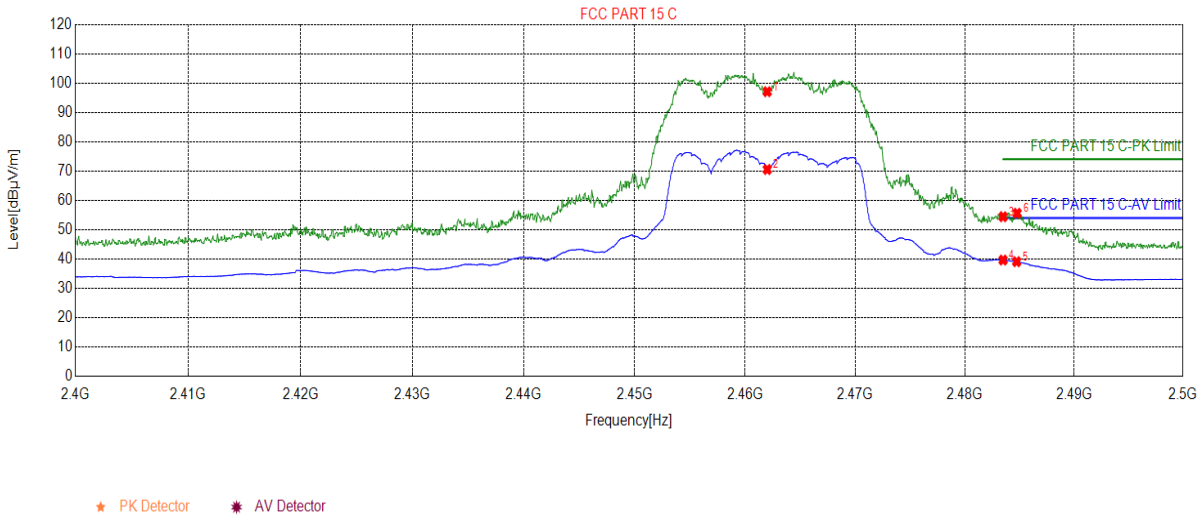
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11g _Channel 11

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 2462.00 | 97.06 | 8.25 | 0.00 | -97.06 | 235 | 245 | Horizontal |
| 2 | 2462.00 | 70.53 | 8.25 | 0.00 | -70.53 | 196 | 232 | Horizontal |
| 3 | 2483.50 | 54.42 | 8.48 | 74.00 | 19.58 | 213 | 15 | Horizontal |
| 4 | 2483.50 | 39.64 | 8.48 | 54.00 | 14.36 | 185 | 21 | Horizontal |
| 5 | 2484.74 | 39.09 | 8.49 | 54.00 | 14.91 | 174 | 341 | Horizontal |
| 6 | 2484.79 | 55.61 | 8.49 | 74.00 | 18.39 | 159 | 112 | Horizontal |

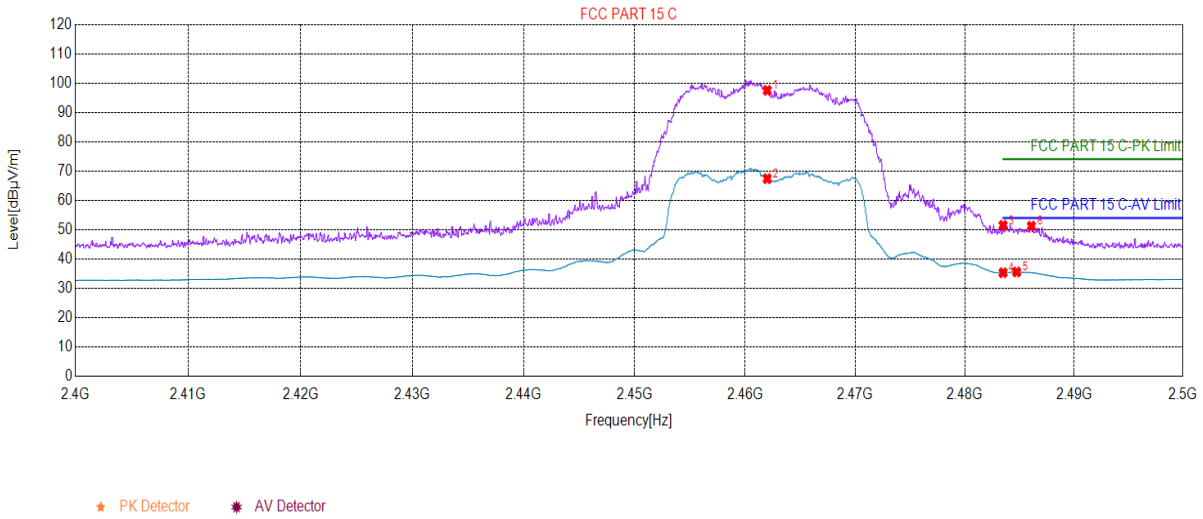
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11g _Channel 11

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 2462.00 | 97.50 | 8.25 | 0.00 | -97.50 | 218 | 241 | Vertical |
| 2 | 2462.00 | 67.39 | 8.25 | 0.00 | -67.39 | 234 | 161 | Vertical |
| 3 | 2483.50 | 51.47 | 8.48 | 74.00 | 22.53 | 241 | 113 | Vertical |
| 4 | 2483.50 | 35.31 | 8.48 | 54.00 | 18.69 | 213 | 26 | Vertical |
| 5 | 2484.74 | 35.59 | 8.49 | 54.00 | 18.41 | 196 | 1 | Vertical |
| 6 | 2486.09 | 51.21 | 8.49 | 74.00 | 22.79 | 159 | 314 | Vertical |

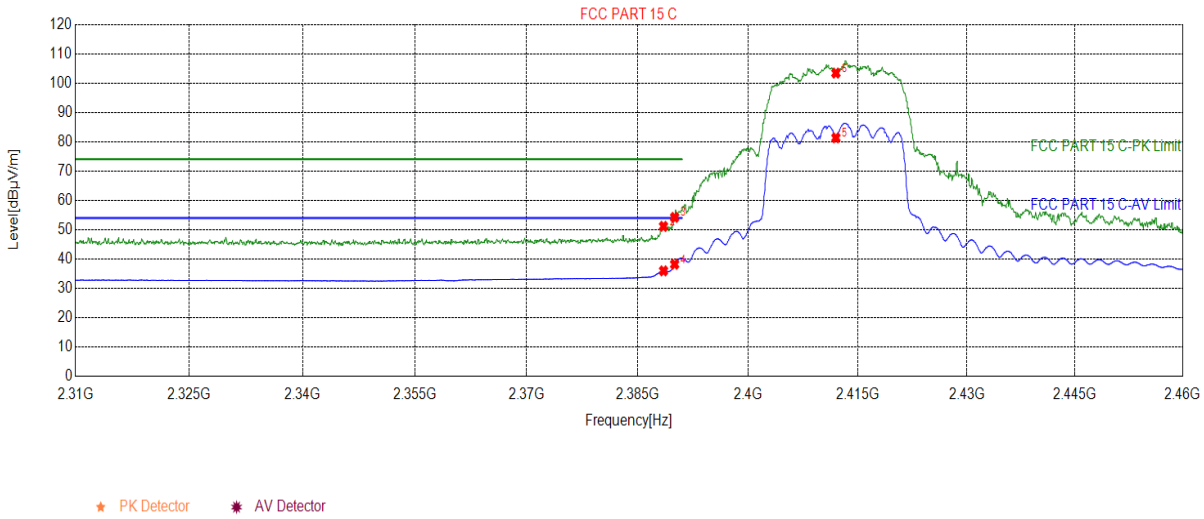
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11n20_Channel 1

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 2388.48 | 35.96 | 9.56 | 54.00 | 18.04 | 159 | 252 | Horizontal |
| 2 | 2388.48 | 51.13 | 9.56 | 74.00 | 22.87 | 196 | 48 | Horizontal |
| 3 | 2390.00 | 54.20 | 9.60 | 74.00 | 19.80 | 213 | 22 | Horizontal |
| 4 | 2390.00 | 38.19 | 9.60 | 54.00 | 15.81 | 261 | 61 | Horizontal |
| 5 | 2412.00 | 81.31 | 9.85 | 0.00 | -81.31 | 234 | 91 | Horizontal |
| 6 | 2412.00 | 103.39 | 9.85 | 0.00 | -103.39 | 154 | 351 | Horizontal |

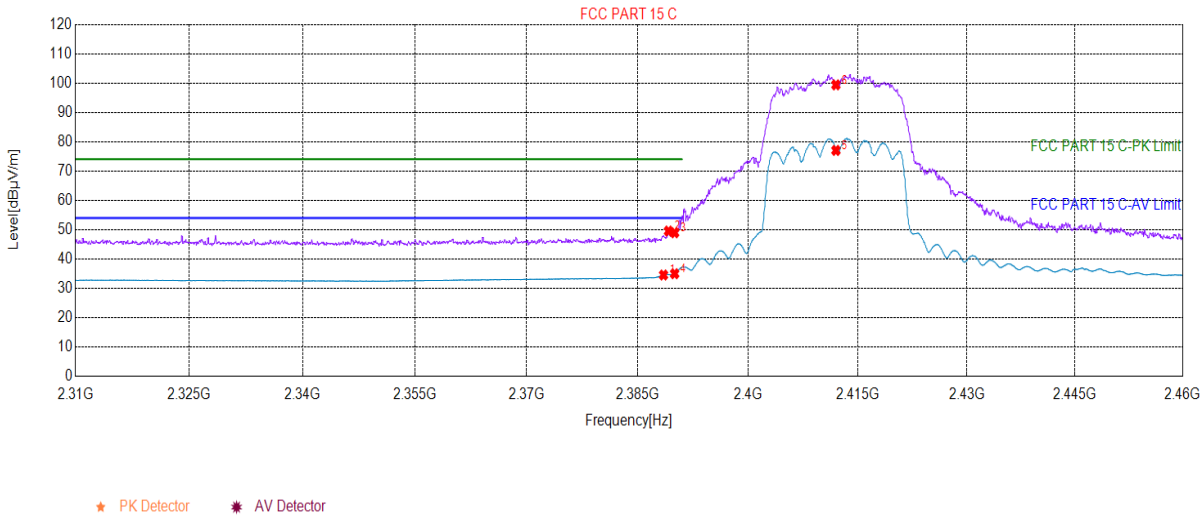
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11n20_Channel 1

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 2388.48 | 34.54 | 9.56 | 54.00 | 19.46 | 258 | 325 | Vertical |
| 2 | 2389.16 | 49.53 | 9.58 | 74.00 | 24.47 | 269 | 31 | Vertical |
| 3 | 2390.00 | 48.94 | 9.60 | 74.00 | 25.06 | 247 | 234 | Vertical |
| 4 | 2390.00 | 34.98 | 9.60 | 54.00 | 19.02 | 159 | 91 | Vertical |
| 5 | 2412.00 | 77.02 | 9.85 | 0.00 | -77.02 | 184 | 241 | Vertical |
| 6 | 2412.00 | 99.38 | 9.85 | 0.00 | -99.38 | 176 | 1 | Vertical |

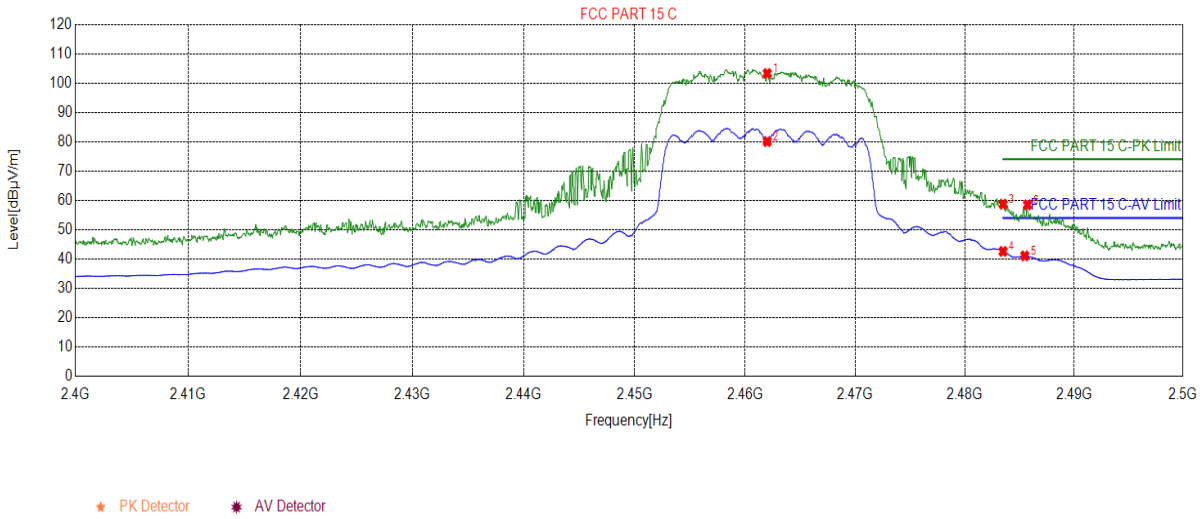
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11n20_Channel 11

### Test Graph



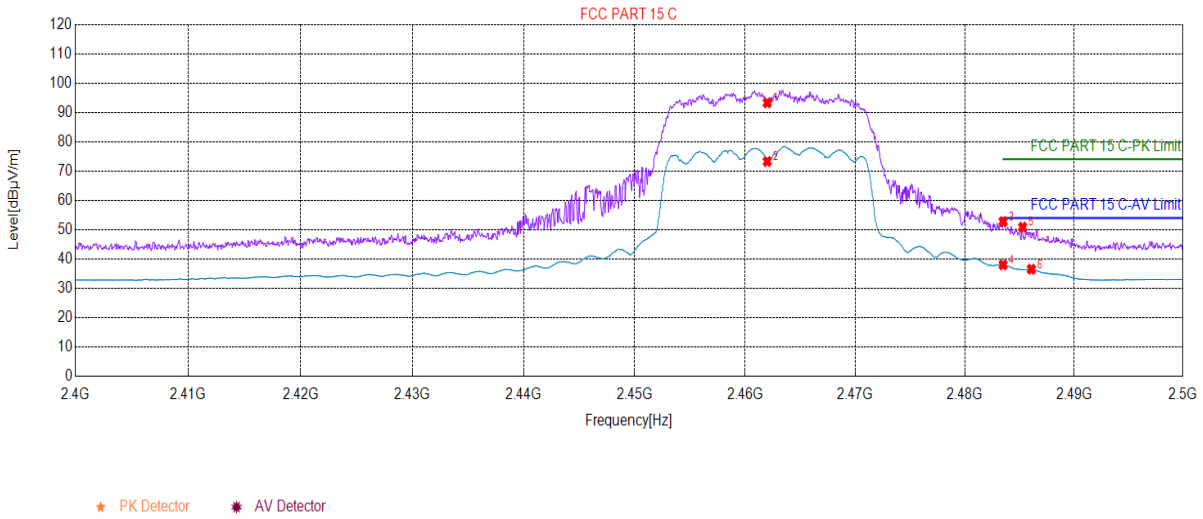

### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 2462.00 | 103.26 | 8.25 | 0.00 | -103.26 | 159 | 241 | Horizontal |
| 2 | 2462.00 | 80.05 | 8.25 | 0.00 | -80.05 | 184 | 213 | Horizontal |
| 3 | 2483.50 | 58.68 | 8.48 | 74.00 | 15.32 | 212 | 64 | Horizontal |
| 4 | 2483.50 | 42.58 | 8.48 | 54.00 | 11.42 | 231 | 55 | Horizontal |
| 5 | 2485.49 | 41.07 | 8.49 | 54.00 | 12.93 | 269 | 9 | Horizontal |
| 6 | 2485.74 | 58.48 | 8.49 | 74.00 | 15.52 | 274 | 14 | Horizontal |

### Final Data List

## 802.11n20_Channel 11

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 2462.00 | 93.26 | 8.25 | 0.00 | -93.26 | 196 | 25 | Vertical |
| 2 | 2462.00 | 73.24 | 8.25 | 0.00 | -73.24 | 185 | 57 | Vertical |
| 3 | 2483.50 | 52.76 | 8.48 | 74.00 | 21.24 | 174 | 215 | Vertical |
| 4 | 2483.50 | 38.01 | 8.48 | 54.00 | 15.99 | 213 | 322 | Vertical |
| 5 | 2485.29 | 50.86 | 8.49 | 74.00 | 23.14 | 261 | 158 | Vertical |
| 6 | 2486.09 | 36.50 | 8.49 | 54.00 | 17.50 | 164 | 147 | Vertical |

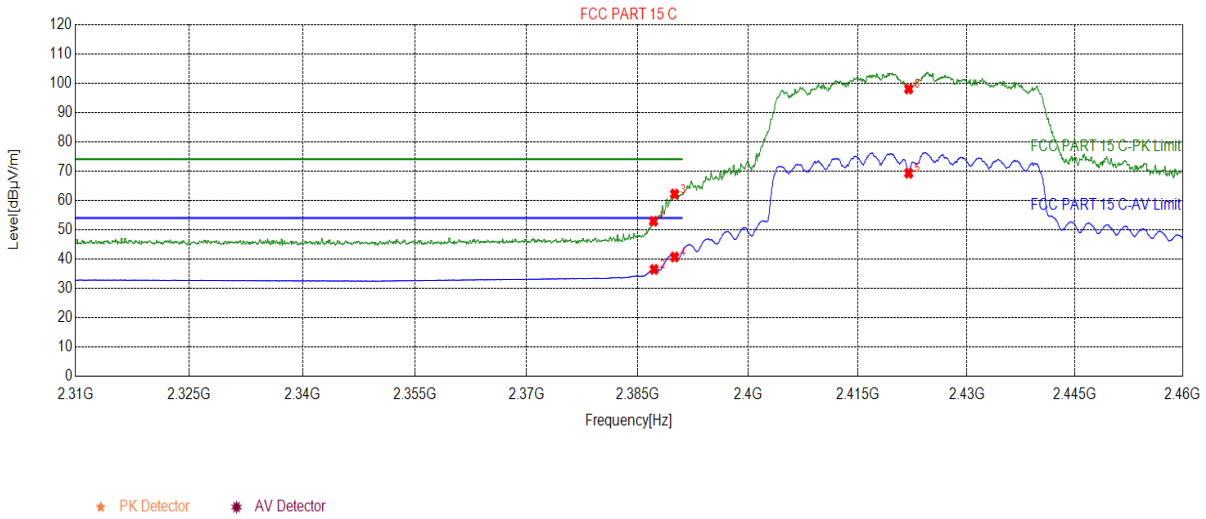
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11n40_Channel 3

### Test Graph



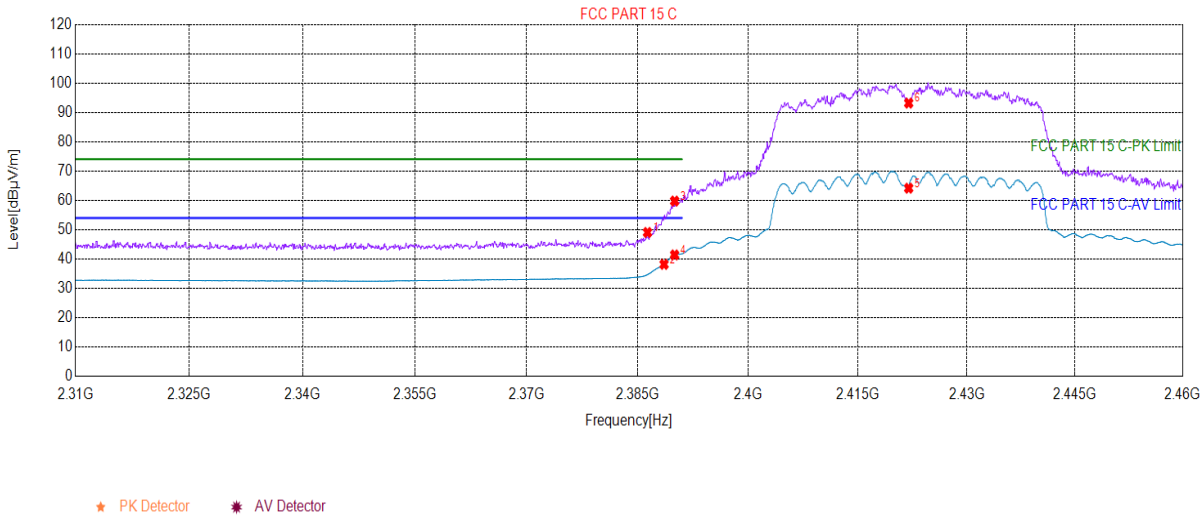

### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 2387.13 | 52.87 | 9.52 | 74.00 | 21.13 | 199 | 231 | Horizontal |
| 2 | 2387.21 | 36.46 | 9.53 | 54.00 | 17.54 | 185 | 325 | Horizontal |
| 3 | 2390.00 | 62.16 | 9.60 | 74.00 | 11.84 | 213 | 27 | Horizontal |
| 4 | 2390.00 | 40.68 | 9.60 | 54.00 | 13.32 | 264 | 159 | Horizontal |
| 5 | 2422.00 | 69.26 | 9.83 | 0.00 | -69.26 | 148 | 16 | Horizontal |
| 6 | 2422.00 | 97.98 | 9.83 | 0.00 | -97.98 | 219 | 94 | Horizontal |

### Final Data List

## 802.11n40_Channel 3

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 2386.31 | 49.06 | 9.50 | 74.00 | 24.94 | 185 | 328 | Vertical |
| 2 | 2388.56 | 38.17 | 9.56 | 54.00 | 15.83 | 196 | 21 | Vertical |
| 3 | 2390.00 | 59.76 | 9.60 | 74.00 | 14.24 | 174 | 15 | Vertical |
| 4 | 2390.00 | 41.39 | 9.60 | 54.00 | 12.61 | 213 | 91 | Vertical |
| 5 | 2422.00 | 64.15 | 9.83 | 0.00 | -64.15 | 246 | 154 | Vertical |
| 6 | 2422.00 | 93.15 | 9.83 | 0.00 | -93.15 | 191 | 218 | Vertical |

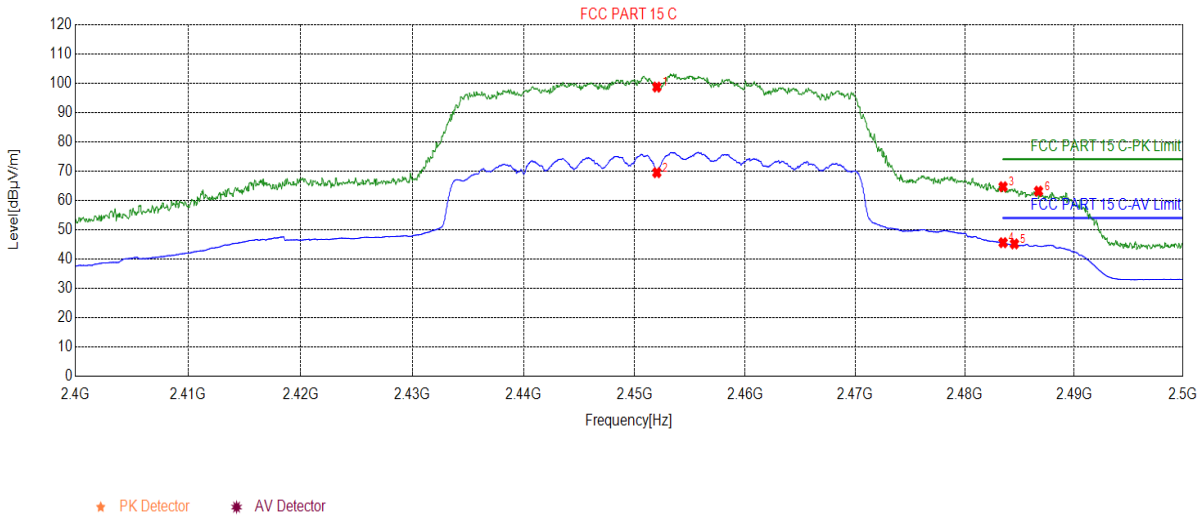
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11n40_Channel 9

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 2452.00 | 98.64 | 8.27 | 0.00 | -98.64 | 159 | 122 | Horizontal |
| 2 | 2452.00 | 69.45 | 8.27 | 0.00 | -69.45 | 196 | 232 | Horizontal |
| 3 | 2483.50 | 64.64 | 8.48 | 74.00 | 9.36 | 174 | 24 | Horizontal |
| 4 | 2483.50 | 45.56 | 8.48 | 54.00 | 8.44 | 185 | 51 | Horizontal |
| 5 | 2484.54 | 45.16 | 8.49 | 54.00 | 8.84 | 213 | 299 | Horizontal |
| 6 | 2486.74 | 63.12 | 8.49 | 74.00 | 10.88 | 261 | 315 | Horizontal |

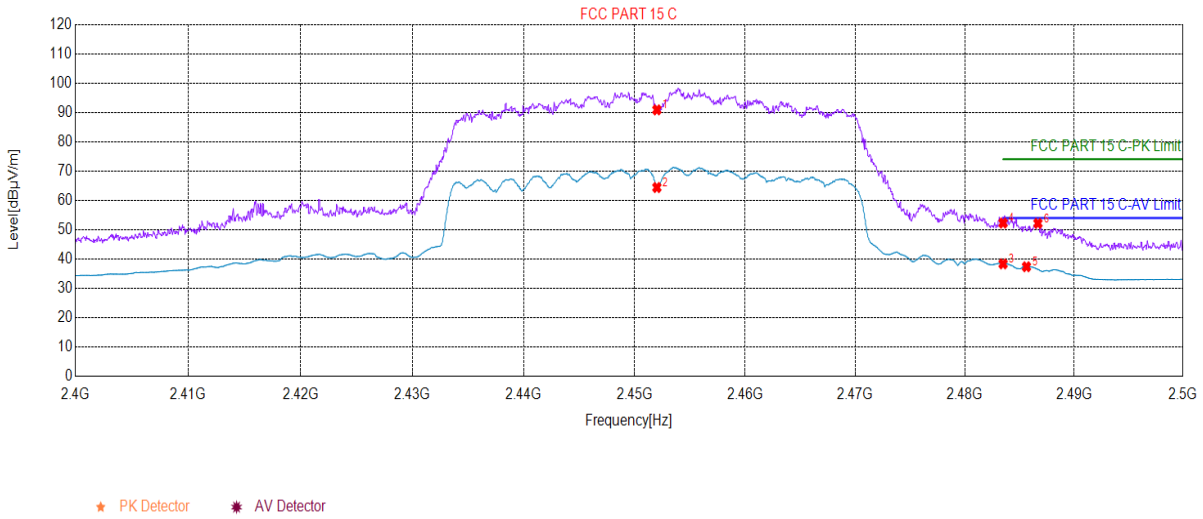
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11n40_Channel 9

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 2452.00 | 90.85 | 8.27 | 0.00 | -90.85 | 258 | 99 | Vertical |
| 2 | 2452.00 | 64.37 | 8.27 | 0.00 | -64.37 | 247 | 62 | Vertical |
| 3 | 2483.50 | 38.34 | 8.48 | 54.00 | 15.66 | 269 | 213 | Vertical |
| 4 | 2483.50 | 52.25 | 8.48 | 74.00 | 21.75 | 216 | 165 | Vertical |
| 5 | 2485.64 | 37.36 | 8.49 | 54.00 | 16.64 | 234 | 199 | Vertical |
| 6 | 2486.69 | 52.14 | 8.49 | 74.00 | 21.86 | 159 | 123 | Vertical |

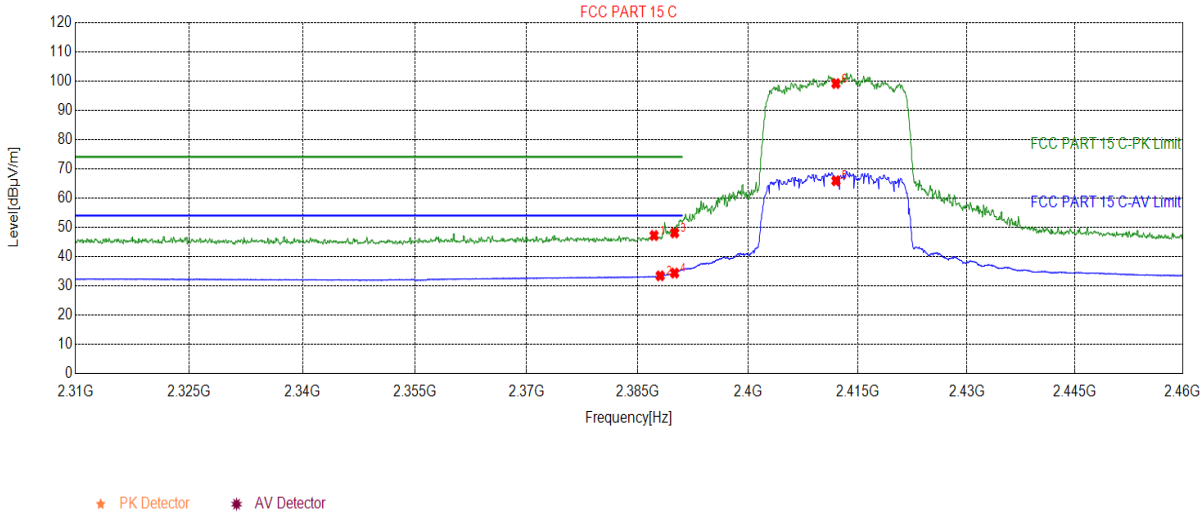
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11ax20_Channel 1

### Test Graph



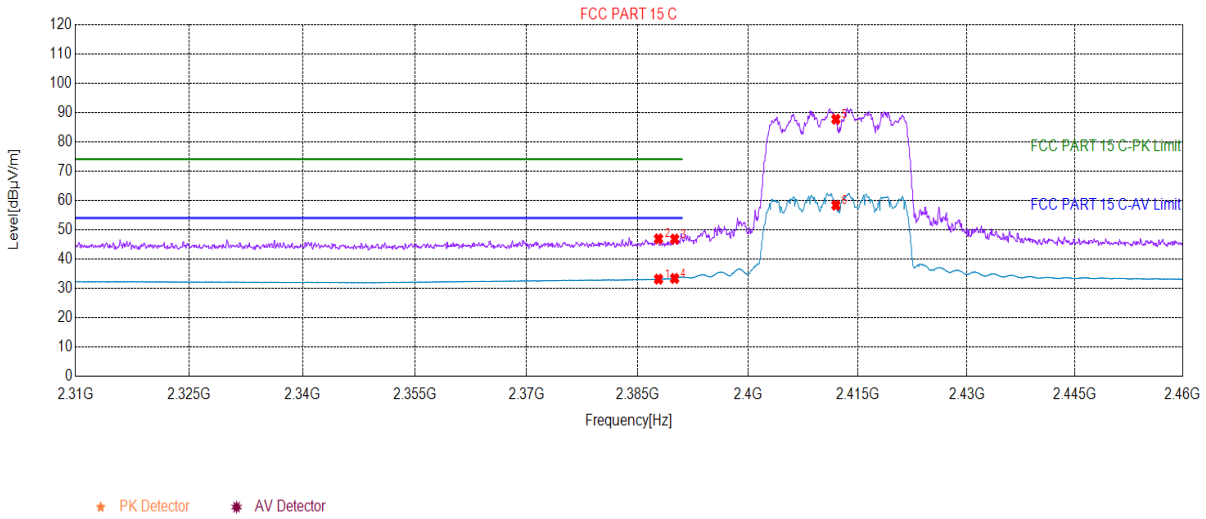

### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 2387.21 | 47.17 | 9.53 | 74.00 | 26.83 | 125 | 95 | Horizontal |
| 2 | 2388.03 | 33.40 | 9.55 | 54.00 | 20.60 | 152 | 216 | Horizontal |
| 3 | 2390.00 | 48.06 | 9.60 | 74.00 | 25.94 | 182 | 159 | Horizontal |
| 4 | 2390.00 | 34.34 | 9.60 | 54.00 | 19.66 | 114 | 198 | Horizontal |
| 5 | 2412.00 | 65.87 | 9.85 | 0.00 | -65.87 | 194 | 261 | Horizontal |
| 6 | 2412.00 | 99.09 | 9.85 | 0.00 | -99.09 | 159 | 9 | Horizontal |

### Final Data List

## 802.11ax20_Channel 1

### Test Graph




### Suspected List

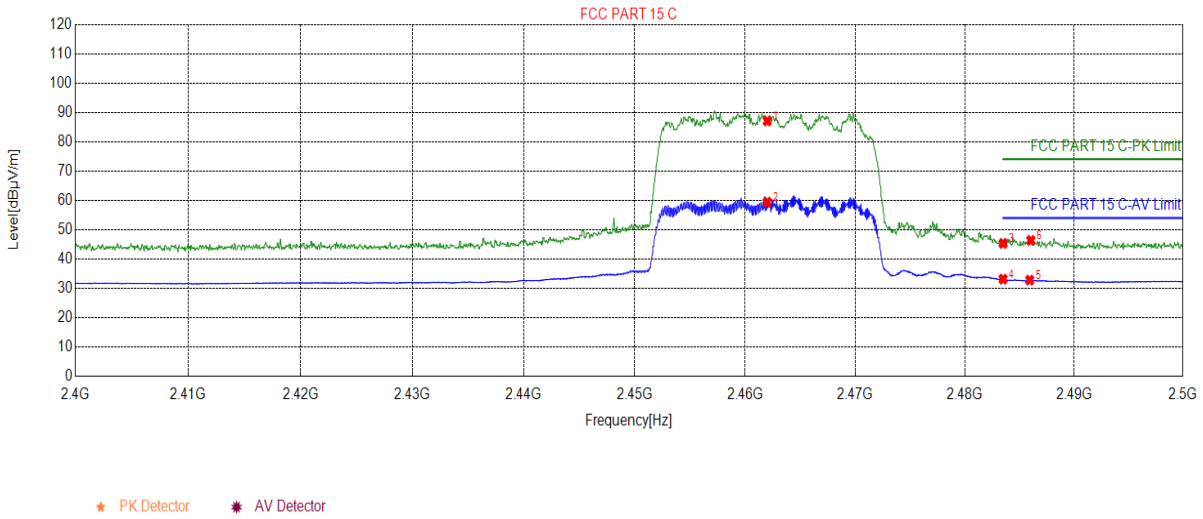
| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 2387.81 | 33.13 | 9.54 | 54.00 | 20.87 | 224 | 51 | Vertical |
| 2 | 2387.81 | 46.88 | 9.54 | 74.00 | 27.12 | 285 | 91 | Vertical |
| 3 | 2390.00 | 46.80 | 9.60 | 74.00 | 27.20 | 210 | 213 | Vertical |
| 4 | 2390.00 | 33.36 | 9.60 | 54.00 | 20.64 | 204 | 216 | Vertical |
| 5 | 2412.00 | 87.67 | 9.85 | 0.00 | -87.67 | 296 | 159 | Vertical |
| 6 | 2412.00 | 58.33 | 9.85 | 0.00 | -58.33 | 200 | 21 | Vertical |

### Final Data List


1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11ax20_Channel 11

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 2462.00 | 87.06 | 8.25 | 0.00 | -87.06 | 175 | 213 | Horizontal |
| 2 | 2462.00 | 59.38 | 8.25 | 0.00 | -59.38 | 184 | 51 | Horizontal |
| 3 | 2483.50 | 45.31 | 8.48 | 74.00 | 28.69 | 101 | 185 | Horizontal |
| 4 | 2483.50 | 33.14 | 8.48 | 54.00 | 20.86 | 196 | 194 | Horizontal |
| 5 | 2485.94 | 32.79 | 8.49 | 54.00 | 21.21 | 144 | 184 | Horizontal |
| 6 | 2486.04 | 46.34 | 8.49 | 74.00 | 27.66 | 150 | 261 | Horizontal |

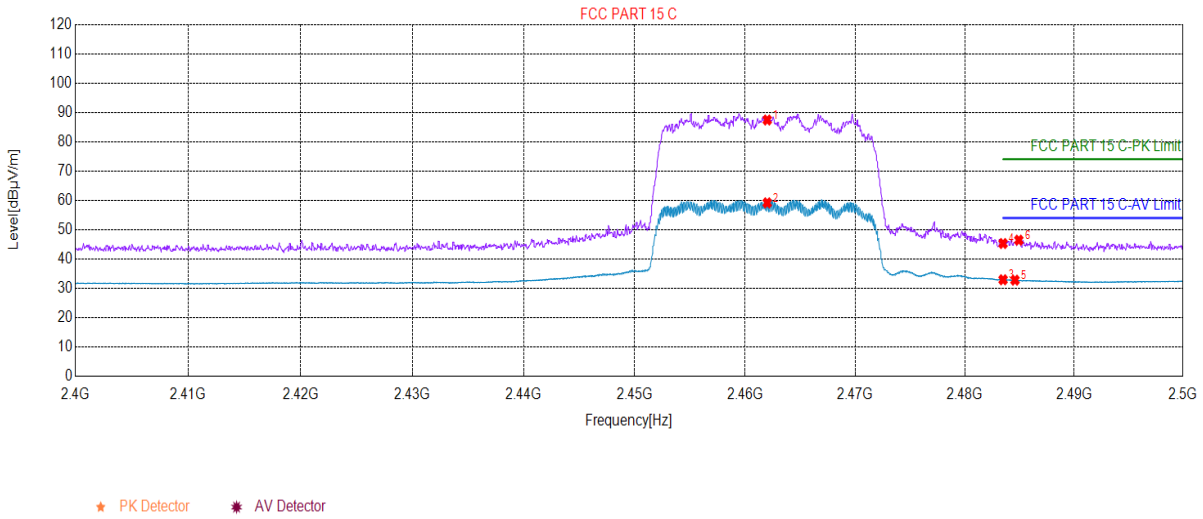
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11ax20_Channel 11

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 2462.00 | 87.40 | 8.25 | 0.00 | -87.40 | 245 | 251 | Vertical |
| 2 | 2462.00 | 59.16 | 8.25 | 0.00 | -59.16 | 201 | 123 | Vertical |
| 3 | 2483.50 | 32.92 | 8.48 | 54.00 | 21.08 | 255 | 216 | Vertical |
| 4 | 2483.50 | 45.29 | 8.48 | 74.00 | 28.71 | 295 | 21 | Vertical |
| 5 | 2484.59 | 32.80 | 8.49 | 54.00 | 21.20 | 241 | 151 | Vertical |
| 6 | 2484.94 | 46.43 | 8.49 | 74.00 | 27.57 | 200 | 91 | Vertical |

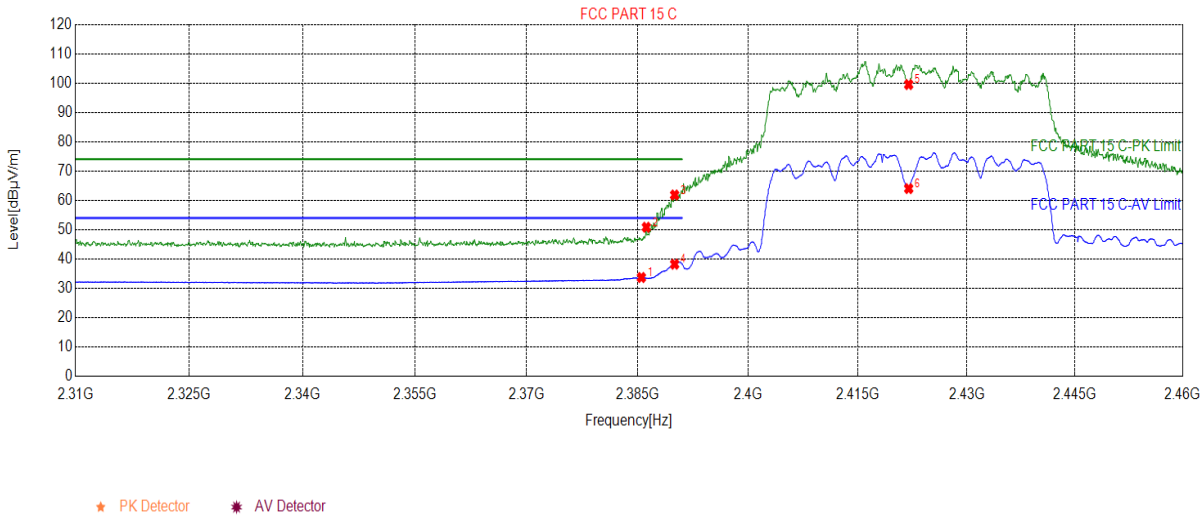
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11ax40_Channel 3

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 2385.48 | 33.69 | 9.48 | 54.00 | 20.31 | 141 | 98 | Horizontal |
| 2 | 2386.16 | 50.82 | 9.50 | 74.00 | 23.18 | 124 | 123 | Horizontal |
| 3 | 2390.00 | 61.82 | 9.60 | 74.00 | 12.18 | 111 | 16 | Horizontal |
| 4 | 2390.00 | 38.22 | 9.60 | 54.00 | 15.78 | 178 | 251 | Horizontal |
| 5 | 2422.00 | 99.49 | 9.83 | 0.00 | -99.49 | 158 | 321 | Horizontal |
| 6 | 2422.00 | 64.00 | 9.83 | 0.00 | -64.00 | 189 | 61 | Horizontal |

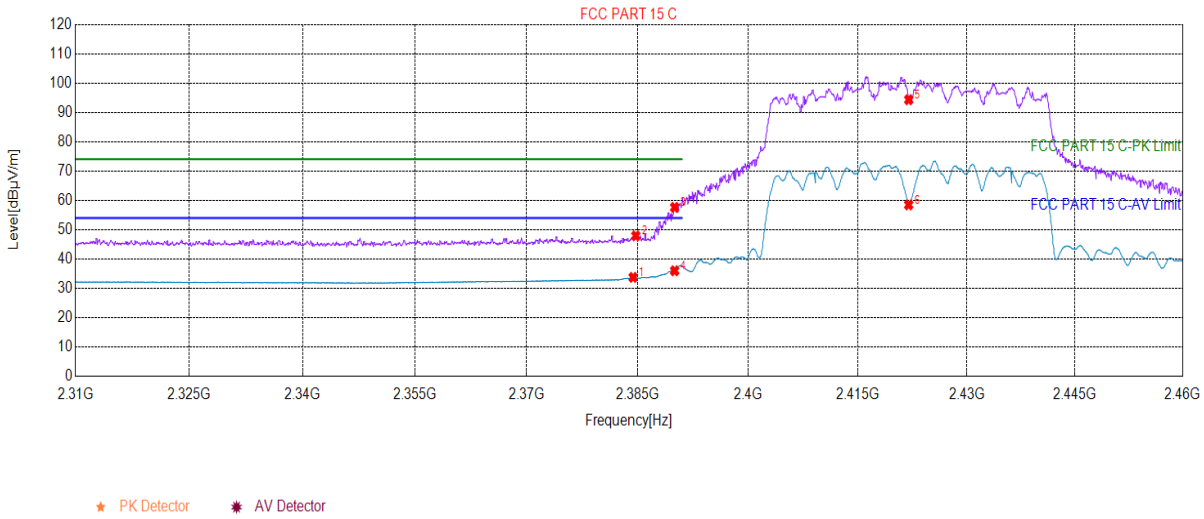
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11ax40_Channel 3

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 2384.36 | 33.74 | 9.45 | 54.00 | 20.26 | 285 | 18 | Vertical |
| 2 | 2384.73 | 47.89 | 9.46 | 74.00 | 26.11 | 296 | 325 | Vertical |
| 3 | 2390.00 | 57.61 | 9.60 | 74.00 | 16.39 | 341 | 237 | Vertical |
| 4 | 2390.00 | 35.98 | 9.60 | 54.00 | 18.02 | 204 | 212 | Vertical |
| 5 | 2422.00 | 94.31 | 9.83 | 0.00 | -94.31 | 288 | 91 | Vertical |
| 6 | 2422.00 | 58.46 | 9.83 | 0.00 | -58.46 | 213 | 215 | Vertical |

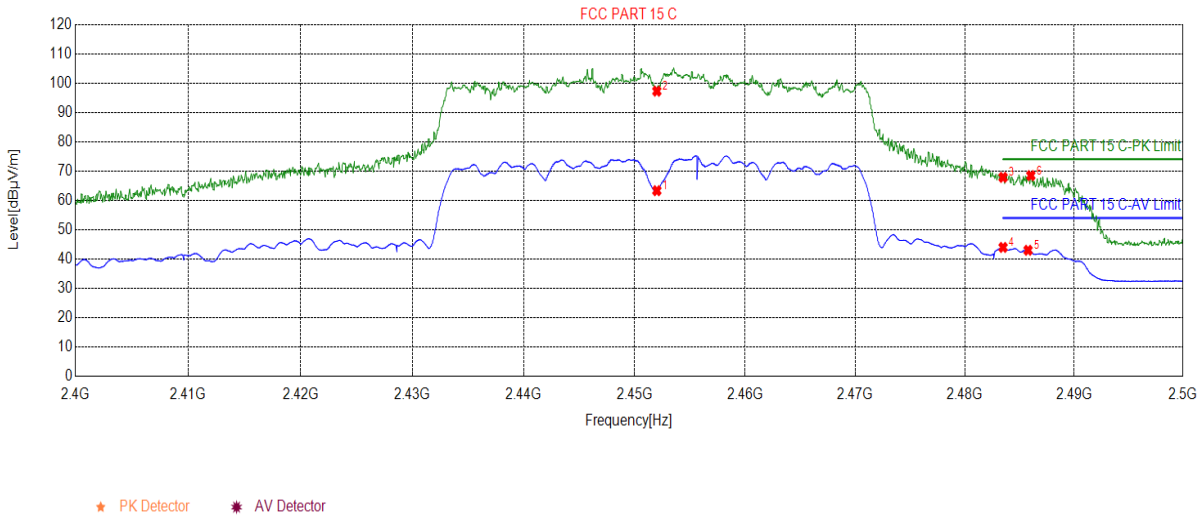
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11a 40_Channel 9

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 2452.00 | 63.30 | 8.27 | 0.00 | -63.30 | 145 | 213 | Horizontal |
| 2 | 2452.00 | 97.23 | 8.27 | 0.00 | -97.23 | 185 | 261 | Horizontal |
| 3 | 2483.50 | 67.84 | 8.48 | 74.00 | 6.16 | 142 | 91 | Horizontal |
| 4 | 2483.50 | 43.96 | 8.48 | 54.00 | 10.04 | 104 | 154 | Horizontal |
| 5 | 2485.79 | 42.98 | 8.49 | 54.00 | 11.02 | 111 | 112 | Horizontal |
| 6 | 2486.04 | 68.44 | 8.49 | 74.00 | 5.56 | 135 | 23 | Horizontal |

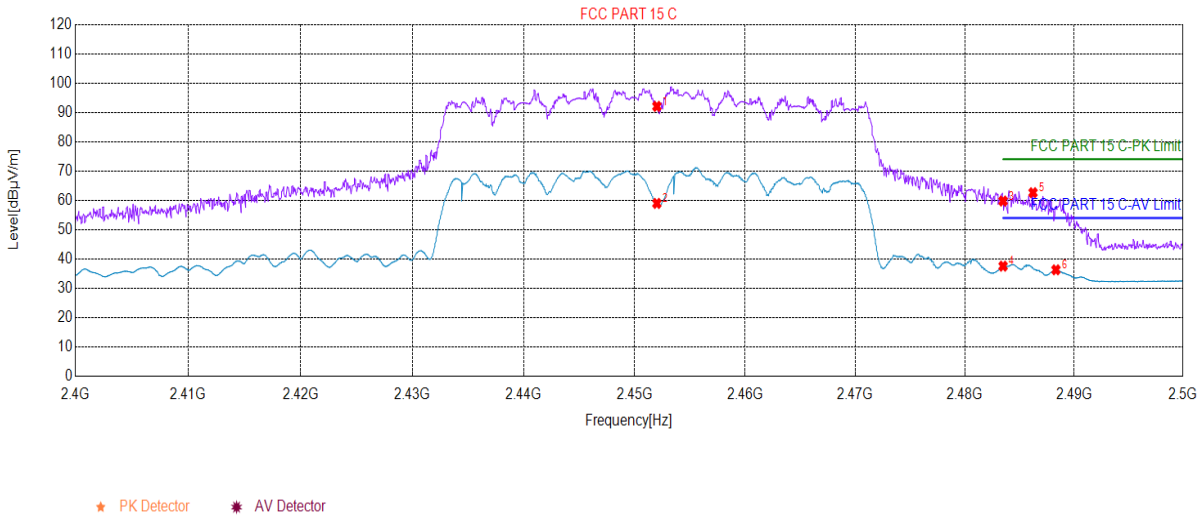
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11ax40_Channel 9

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 2452.00 | 92.04 | 8.27 | 0.00 | -92.04 | 245 | 215 | Vertical |
| 2 | 2452.00 | 58.96 | 8.27 | 0.00 | -58.96 | 341 | 191 | Vertical |
| 3 | 2483.50 | 59.77 | 8.48 | 74.00 | 14.23 | 305 | 231 | Vertical |
| 4 | 2483.50 | 37.56 | 8.48 | 54.00 | 16.44 | 298 | 91 | Vertical |
| 5 | 2486.24 | 62.62 | 8.49 | 74.00 | 11.38 | 266 | 66 | Vertical |
| 6 | 2488.34 | 36.31 | 8.50 | 54.00 | 17.69 | 310 | 351 | Vertical |

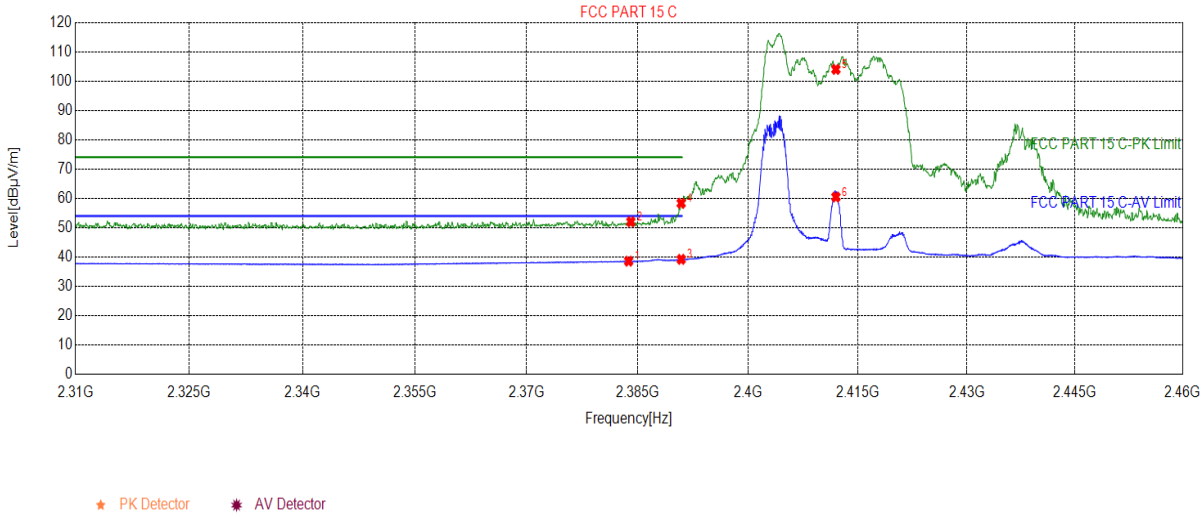
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086 t (86-29) 6282 7885 www.sgsgroup.com.cn
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086 t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11AX20_Channel 1 26ToneRU0

### Test Graph



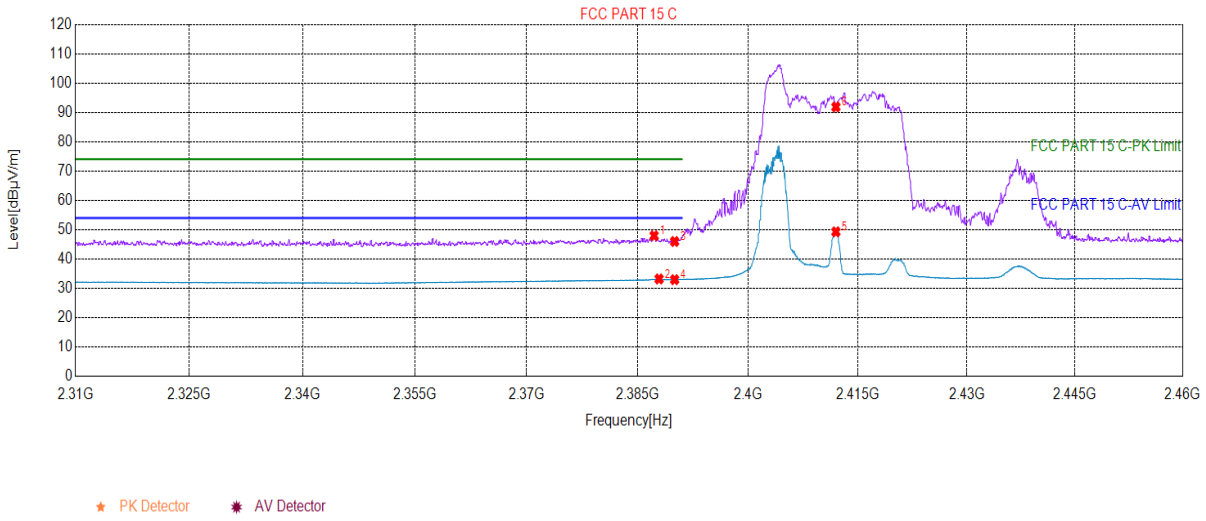

### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 2383.76 | 38.57 | 9.43 | 54.00 | 15.43 | 174 | 96 | Horizontal |
| 2 | 2384.06 | 52.01 | 9.44 | 74.00 | 21.99 | 185 | 12 | Horizontal |
| 3 | 2390.89 | 39.20 | 9.63 | 54.00 | 14.80 | 196 | 213 | Horizontal |
| 4 | 2390.89 | 58.32 | 9.63 | 74.00 | 15.68 | 231 | 215 | Horizontal |
| 5 | 2412.00 | 103.98 | 9.85 | 0.00 | -103.98 | 236 | 155 | Horizontal |
| 6 | 2412.00 | 60.46 | 9.85 | 0.00 | -60.46 | 147 | 231 | Horizontal |

### Final Data List

## 802.11AX20_Channel 1 26ToneRU0

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 2387.21 | 47.93 | 9.53 | 74.00 | 26.07 | 194 | 185 | Vertical |
| 2 | 2387.88 | 33.19 | 9.55 | 54.00 | 20.81 | 196 | 123 | Vertical |
| 3 | 2390.00 | 45.98 | 9.60 | 74.00 | 28.02 | 321 | 26 | Vertical |
| 4 | 2390.00 | 32.95 | 9.60 | 54.00 | 21.05 | 232 | 91 | Vertical |
| 5 | 2412.00 | 49.27 | 9.85 | 0.00 | -49.27 | 261 | 235 | Vertical |
| 6 | 2412.00 | 91.84 | 9.85 | 0.00 | -91.84 | 154 | 321 | Vertical |

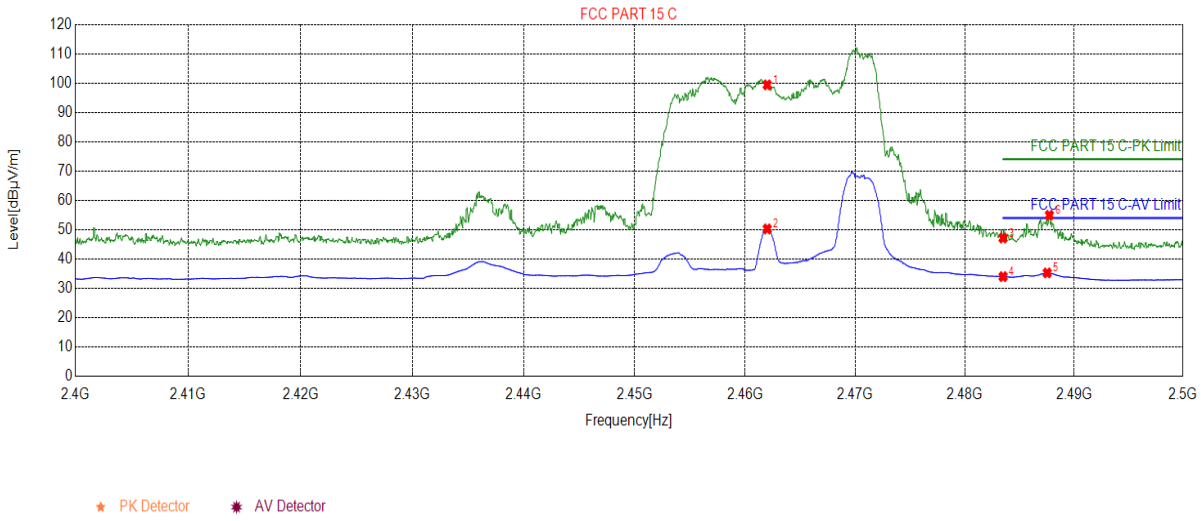
### Final Data List



1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086
t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11AX20_Channel 11 26ToneRU8

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 2462.00 | 99.37 | 8.25 | 0.00 | -99.37 | 174 | 95 | Horizontal |
| 2 | 2462.00 | 50.25 | 8.25 | 0.00 | -50.25 | 185 | 12 | Horizontal |
| 3 | 2483.50 | 47.15 | 8.48 | 74.00 | 26.85 | 196 | 163 | Horizontal |
| 4 | 2483.50 | 34.00 | 8.48 | 54.00 | 20.00 | 321 | 223 | Horizontal |
| 5 | 2487.54 | 35.26 | 8.50 | 54.00 | 18.74 | 231 | 205 | Horizontal |
| 6 | 2487.74 | 54.92 | 8.50 | 74.00 | 19.08 | 151 | 315 | Horizontal |

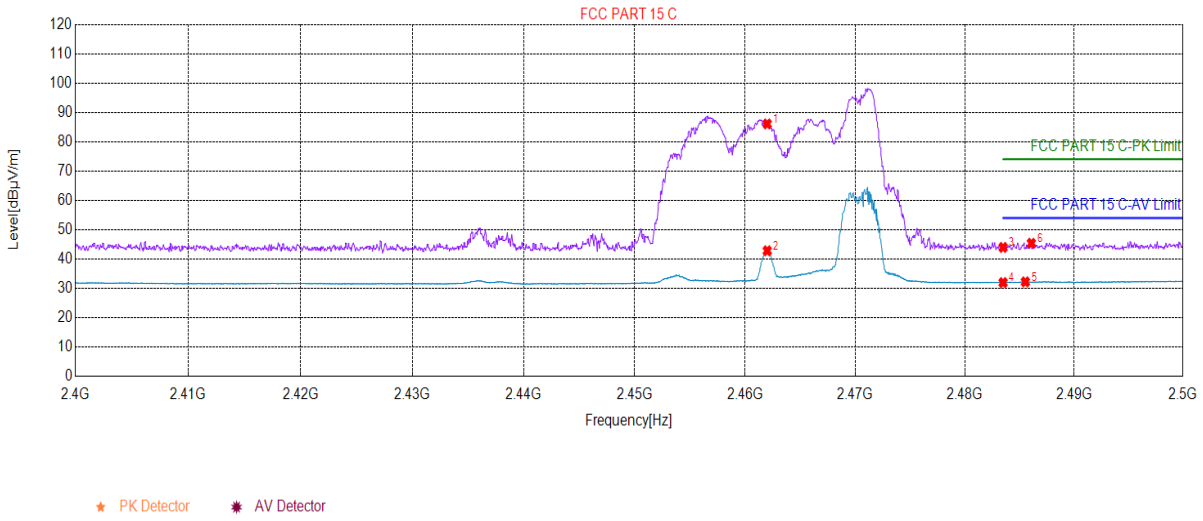
### Final Data List



SGS-CSTC Standards Technical Services (Xi'an) Co., Ltd. Wireless Laboratory
1/F, Unit D, Building 1, Kanghong Orange Science Park, No.137, Keyuan 3rd Road, Fengdong New Town, Xi'an, Shaanxi, China 710086
中国·西安·沣东新城科源三路137号康鸿橙方科技园1号楼D单元1层 邮编: 710086
t (86-29) 6282 7885 www.sgsgroup.com.cn
t (86-29) 6282 7885 sgs.china@sgs.com

## 802.11AX20_Channel 11 26ToneRU8

### Test Graph




### Suspected List

| Suspected List | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| NO. | Freq. [MHz] | Level [dBµV/m] | Factor [dB] | Limit [dBµV/m] | Margin [dB] | Height [cm] | Angle [°] | Polarity |
| 1 | 2462.00 | 86.07 | 8.25 | 0.00 | -86.07 | 171 | 94 | Vertical |
| 2 | 2462.00 | 42.81 | 8.25 | 0.00 | -42.81 | 185 | 123 | Vertical |
| 3 | 2483.50 | 43.96 | 8.48 | 74.00 | 30.04 | 196 | 215 | Vertical |
| 4 | 2483.50 | 31.96 | 8.48 | 54.00 | 22.04 | 321 | 61 | Vertical |
| 5 | 2485.54 | 32.20 | 8.49 | 54.00 | 21.80 | 261 | 32 | Vertical |
| 6 | 2486.09 | 45.36 | 8.49 | 74.00 | 28.64 | 124 | 155 | Vertical |

### Final Data List

*Remark:*
*The field strength is calculated by adding the Antenna Factor, Cable Factor & Preamplifier. The basic equation with a sample calculation is as follows:*

Factor= Antenna Factor + Cable Factor – Preamplifier Factor

Final Test Level =Receiver Reading + Factor
All Modes have been tested, but only the worst case data displayed in this report.

The End