

|                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                |                                             |                                                 |                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|-------------------------------------------------|----------------------------------|
| <b>Prüfbericht-Nr.:</b><br><i>no.:</i>                                                                                                                                                                                                                                                                                                                                                                                 | <b>CN25A5EX 002</b>                                                                                                                                                                                                                                                                            | <b>Auftrags-Nr.:</b><br><i>Order no.:</i>   | <b>168520158</b>                                | Seite 1 von 77<br>Page 1 of 77   |
| <b>Kunden-Referenz-Nr.:</b><br><i>Client reference no.:</i>                                                                                                                                                                                                                                                                                                                                                            | <b>N/A</b>                                                                                                                                                                                                                                                                                     | <b>Auftragsdatum:</b><br><i>Order date:</i> | <b>2024-12-20</b>                               |                                  |
| <b>Auftraggeber:</b><br><i>Client:</i>                                                                                                                                                                                                                                                                                                                                                                                 | <b>Shenzhen RAKwireless Technology Co.,Ltd.</b><br>Room 506, Building B, New Compark, Pingshan First Road, Taoyuan Street,<br>Nanshan District, Shenzhen, Guangdong, P.R. China                                                                                                                |                                             |                                                 |                                  |
| <b>Prüfgegenstand:</b><br><i>Test item:</i>                                                                                                                                                                                                                                                                                                                                                                            | <b>WisGate Edge Prime</b>                                                                                                                                                                                                                                                                      |                                             |                                                 |                                  |
| <b>Bezeichnung / Typ-Nr.:</b><br><i>Identification / Type no.:</i>                                                                                                                                                                                                                                                                                                                                                     | <b>RAK7240CV2</b><br>(Trademark:  )                                                                                                                                                                           |                                             |                                                 |                                  |
| <b>Auftrags-Inhalt:</b><br><i>Order content:</i>                                                                                                                                                                                                                                                                                                                                                                       | <b>CIIPC and C4PC</b>                                                                                                                                                                                                                                                                          |                                             |                                                 |                                  |
| <b>Prüfgrundlage:</b><br><i>Test specification:</i>                                                                                                                                                                                                                                                                                                                                                                    | CFR47 FCC Part 15: Subpart C Section 15.247<br>CFR47 FCC Part 22<br>CFR47 FCC Part 24<br>CFR47 FCC Part 27<br>RSS-247 Issue 3<br>RSS-130 Issue 2<br>RSS-132 Issue 3<br>RSS-133 Issue 6<br>RSS-139 Issue 3                                                                                      |                                             |                                                 |                                  |
| <b>Wareneingangsdatum:</b><br><i>Date of sample receipt:</i>                                                                                                                                                                                                                                                                                                                                                           | <b>2024-12-20</b>                                                                                                                                                                                                                                                                              | Refer to photos documents                   |                                                 |                                  |
| <b>Prüfmuster-Nr.:</b><br><i>Test sample no.:</i>                                                                                                                                                                                                                                                                                                                                                                      | <b>A003893351-006</b>                                                                                                                                                                                                                                                                          |                                             |                                                 |                                  |
| <b>Prüfzeitraum:</b><br><i>Testing period:</i>                                                                                                                                                                                                                                                                                                                                                                         | <b>2025-01-06 - 2025-04-10</b>                                                                                                                                                                                                                                                                 |                                             |                                                 |                                  |
| <b>Ort der Prüfung:</b><br><i>Place of testing:</i>                                                                                                                                                                                                                                                                                                                                                                    | <b>TÜV Rheinland (Shenzhen)<br/>Co., Ltd.</b>                                                                                                                                                                                                                                                  |                                             |                                                 |                                  |
| <b>Prüflaboratorium:</b><br><i>Testing laboratory:</i>                                                                                                                                                                                                                                                                                                                                                                 | <b>TÜV Rheinland (Shenzhen)<br/>Co., Ltd.</b>                                                                                                                                                                                                                                                  |                                             |                                                 |                                  |
| <b>Prüfergebnis*:</b><br><i>Test result*:</i>                                                                                                                                                                                                                                                                                                                                                                          | <b>Pass</b>                                                                                                                                                                                                                                                                                    |                                             |                                                 |                                  |
| <b>geprüft von:</b><br><i>tested by:</i>                                                                                                                                                                                                                                                                                                                                                                               | <b>Hardy</b><br><i>Suo</i>                                                                                                                                                                                                                                                                     |                                             | <b>genehmigt von:</b><br><i>authorized by:</i>  | <b>Lin Lin</b>                   |
| <b>Datum:</b><br><i>Date:</i>                                                                                                                                                                                                                                                                                                                                                                                          | <b>2025-04-16</b>                                                                                                                                                                                                                                                                              |                                             | <b>Ausstellungsdatum:</b><br><i>Issue date:</i> | <b>2025-04-16</b>                |
| <b>Stellung / Position</b>                                                                                                                                                                                                                                                                                                                                                                                             | <b>Sachverständige(r)/Expert</b>                                                                                                                                                                                                                                                               |                                             | <b>Stellung / Position</b>                      | <b>Sachverständige(r)/Expert</b> |
| <b>Sonstiges / Other:</b>                                                                                                                                                                                                                                                                                                                                                                                              | FCC ID: 2AF6B-RAK5146, IC: 25908-RAK5146<br>HMN: RAK7240CV2<br>*The LTE module, Wi-Fi module and Lora module are combination in a new host, the co-located radiated spurious emission testing was performed.<br>** This product contains transmitter modules, refer to clause 3.2 for details. |                                             |                                                 |                                  |
| <b>Zustand des Prüfgegenstandes bei Anlieferung:</b><br><i>Condition of the test item at delivery:</i>                                                                                                                                                                                                                                                                                                                 | <b>Prüfmuster vollständig und unbeschädigt</b><br><i>Test item complete and undamaged</i>                                                                                                                                                                                                      |                                             |                                                 |                                  |
| * Legende:                                                                                                                                                                                                                                                                                                                                                                                                             | P(ass) = entspricht o.g. Prüfgrundlage(n)    F(ail) = entspricht nicht o.g. Prüfgrundlage(n)    N/A = nicht anwendbar    N/T = nicht getestet                                                                                                                                                  |                                             |                                                 |                                  |
| * Legend:                                                                                                                                                                                                                                                                                                                                                                                                              | P(ass) = passed a.m. test specification(s)    F(ail) = failed a.m. test specification(s)    N/A = not applicable    N/T = not tested                                                                                                                                                           |                                             |                                                 |                                  |
| <b>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.</b><br><i>This only relates to the a. m. test sample. Without permission of the test center this is not permitted to be duplicated in extracts. This does not entitle to carry any test mark.</i> |                                                                                                                                                                                                                                                                                                |                                             |                                                 |                                  |

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## Anmerkungen Remarks

|   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | <p>Alle eingesetzten Prüfmittel waren zum angegebenen Prüfzeitraum gemäß eines festgelegten Kalibrierungsprogramms unseres Prüfhauses kalibriert. Sie entsprechen den in den Prüfprogrammen hinterlegten Anforderungen. Die Rückverfolgbarkeit der eingesetzten Prüfmittel ist durch die Einhaltung der Regelungen unseres Managementsystems gegeben.<br/>Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden.</p> <p><i>The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system. Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request.</i></p>                                                                                                                                          |
| 2 | <p>Wie vertraglich vereinbart, wurde dieses Dokument nur digital unterzeichnet. Der TÜV Rheinland hat nicht überprüft, welche rechtlichen oder sonstigen diesbezüglichen Anforderungen für dieses Dokument gelten. Diese Überprüfung liegt in der Verantwortung des Benutzers dieses Dokuments. Auf Verlangen des Kunden kann der TÜV Rheinland die Gültigkeit der digitalen Signatur durch ein gesondertes Dokument bestätigen. Diese Anfrage ist an unseren Vertrieb zu richten. Eine Umweltgebühr für einen solchen zusätzlichen Service wird erhoben.</p> <p><i>As contractually agreed, this document has been signed digitally only. TUV Rheinland has not verified and unable to verify which legal or other pertaining requirements are applicable for this document. Such verification is within the responsibility of the user of this document. Upon request by its client, TUV Rheinland can confirm the validity of the digital signature by a separate document. Such request shall be addressed to our Sales department. An environmental fee for such additional service will be charged.</i></p>                                                               |
| 3 | <p>Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben.<br/>Abweichungen von Prüfspezifikation(en) oder Kundenanforderungen sind in der jeweiligen Prüfklausel im Bericht aufgeführt.</p> <p><i>Test clauses with remark of * are subcontracted to qualified subcontractors and described under the respective test clause in the report.</i><br/><i>Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.</i></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 4 | <p>Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnissen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2021, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. Zu weiteren Informationen bezüglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019.</p> <p><i>The decision rule for statements of conformity, based on numerical measurement results, in this is based on the "Zero Guard Band Rule" and "Simple Acceptance" in accordance with ILAC G8:2019 and IEC Guide 115:2021, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the . For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019.</i></p> |

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## ***Test Summary***

### ***5.1 Radiated Spurious Emissions***

*RESULT: Pass*

### ***5.2 Conducted emissions***

*RESULT: Pass*

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# 1 General Remarks

## 1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: Test Set-up Photos

# 2 Test Sites

## 2.1 Test Facilities

**TÜV Rheinland (Shenzhen) Co., Ltd.**

2-3F, 101 & 102, No.2, Nuclear Power Industrial Park, Fuming Community, Fucheng Street, Longhua District, Shenzhen 518000, People's Republic of China

A2LA Certificate Number: 5162.01

## 2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

| Unwanted Emission Testing (TS9975) |                                           |              |                   |              |                        |                         |
|------------------------------------|-------------------------------------------|--------------|-------------------|--------------|------------------------|-------------------------|
| Equip. No.                         | Description                               | Manufacturer | Model             | Serial No.   | Cal. Date (DD.MM.YYYY) | Cal. until (DD.MM.YYYY) |
| G1826021                           | EMI Test Receiver                         | R&S          | ESR 7             | 102021       | 29.09.2024             | 28.09.2025              |
| G1826023                           | Signal Analyzer                           | R&S          | FSV 40            | 101439       | 29.09.2024             | 28.09.2025              |
| G1826024                           | System Controller Interface               | R&S          | SCI-100           | S10010038    | N/A                    | N/A                     |
| G1826025                           | Filterbank                                | R&S          | Wlan              | 100759       | 29.09.2024             | 28.09.2025              |
| G1826026                           | OSP                                       | R&S          | OSP 120           | 102040       | N/A                    | N/A                     |
| G1826028                           | Pre-amplifier                             | R&S          | SCU08F1           | 08320031     | 29.09.2024             | 28.09.2025              |
| G1826029                           | Amplifier                                 | R&S          | SCU-18F           | 180070       | 29.09.2024             | 28.09.2025              |
| G1826030                           | Amplifier                                 | R&S          | SCU40A            | 100475       | 29.09.2024             | 28.09.2025              |
| G1826031                           | Trilog Broadband Antenna (30 MHz - 7 GHz) | Schwarzbeck  | VULB 9162         | 193          | 28.09.2024             | 27.09.2026              |
| G1826032                           | Double-Ridged Antenna (1 - 18 GHz)        | ETS-LINDGREN | 3117              | 00218717     | 28.09.2024             | 27.09.2026              |
| G1826033                           | Wideband Ridged Horn Antenna (18-40 GHz)  | Steatite     | QMS-00880         | 19067        | 28.09.2024             | 27.09.2026              |
| G1826034                           | Active Loop Antenna                       | Schwarzbeck  | FMZB 1513         | 302          | 28.09.2024             | 27.09.2026              |
| G1826036                           | Test software                             | R&S          | EMC32 (V10.60.10) | N/A          | N/A                    | N/A                     |
| G1826037                           | Control PC                                | Dell         | OptiPlex 7050     | 36NV9P2      | N/A                    | N/A                     |
| G1826433                           | 3m Semi-Anechoic Chamber                  | Albatross    | SAC-3m            | APC17151-SAC | 14.09.2024             | 13.09.2027              |

| Conducted Emission on AC Mains    |                                           |                     |            |            |
|-----------------------------------|-------------------------------------------|---------------------|------------|------------|
| Equipment                         | Manufacturer                              | Model No.           | Serial No. | Cal. Until |
| EMI Test Receiver                 | R&S                                       | ESR3                | 102680     | 2026-02-09 |
| Artificial Mains Network          | R&S                                       | ENV216              | 102333     | 2025-07-22 |
| Impedance Stabilisation Network   | R&S                                       | ENY81               | 100323     | 2025-07-22 |
| LISN ENV216-Receiver cable in SR3 | Calibration frequency range: 9 kHz~30 MHz |                     |            | 2025-12-20 |
| EMC32 test software               | R&S                                       | EMC32(Ver.10.50.00) | N/A        | N/A        |

## 2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

## 2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

## 2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements as below table

| Parameter                                              | Uncertainty (k=2)                           |
|--------------------------------------------------------|---------------------------------------------|
| Occupied Channel Bandwidth                             | $\pm 2.08 \%$                               |
| RF output power, conducted                             | $\pm 0.99 \text{ dB}$                       |
| RF power density, conducted                            | $\pm 0.99 \text{ dB}$                       |
| Unwanted Emissions, conducted                          | $\pm 0.89 \text{ dB}$                       |
| All emissions, radiated                                | $\pm 4.17 \text{ dB}$                       |
| Conducted Emission, (9kHz to 150kHz)/(150kHz to 30MHz) | $\pm 3.70 \text{ dB} / \pm 3.30 \text{ dB}$ |

## 2.6 Location of Original Data

The original copies of all test data taken during actual testing were at this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) file for certification follow-up purposes.

## 2.7 Status of Facility Used for Testing

The TÜV Rheinland (Shenzhen) Co., Ltd. Test facility located at 2-3F, 101 & 102, No.2, Nuclear Power Industrial Park, Fuming Community, Fucheng Street, Longhua District, Shenzhen 518000, People's Republic of China. is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

## 3 General Product Information

### 3.1 Product Function and Intended Use

The EUT is a WisGate Edge Prime which supports GNSS, Lora, 2.4GHz Wi-Fi and WCDMA/LTE wireless technologies.

Contains FCC ID: 2AF6B-RAK634, 2AF6B-RAK5146, XMR201807EG95NA.

Contains IC: 25908-RAK634, 25908-RAK5146, 10224A-2018EG95NA.

Remark:

- 1) This product assembles a Lora Module (M/N: RAK5146) without change than it was approved except add an alternative LoRa fiberglass antenna (M/N: RAKARG12) with lower antenna gain
- 2) This product assembles a 2.4GHz Wi-Fi module (M/N: RAK634) without change than it was approved except disable one transmitter antenna via software by RAK
- 3) This product assembles a LTE module (M/N: EG95-NA) without change than it was approved except a new LTE fiberglass antenna (M/N: RAKARL01) with lower antenna gain

RAK7240CV2 has two configurations, other aspects are identical:

- 1) With DC input connector
- 2) Without DC input connector

This report is for FCC CIIPC and ISED C4PC as changed transmit antennas and will be installed into HOST WisGate Edge Prime (M/N: RAK7240CV2), radiated spurious emissions for WCDMA/LTE and co-location were re-performed.

For details refer to the User Manual, Technical Description and Circuit Diagram.

### 3.2 Ratings and System Details

Table 2: Technical Specification of EUT

| General Information of EUT                                | Description                                                                                                                               |
|-----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Kind of Equipment:                                        | WisGate Edge Prime                                                                                                                        |
| Type Designation:                                         | RAK7240CV2                                                                                                                                |
| HMN:                                                      | RAK7240CV2                                                                                                                                |
| Operating Voltage:                                        | DC 9-24V or<br>DC 48V via POE adapter                                                                                                     |
| Testing Voltage:                                          | AC 120V, 60Hz (Power supply to POE adapter)                                                                                               |
| Operating Temperature Range:                              | -30 °C ~ +55 °C (Use DC connector supply only)<br>-10 °C ~ +40 °C (Use PoE adapter supply only)                                           |
| POE adapter information:                                  | Model: R012-4800500<br>Input: AC 100-240V, 50/60Hz, 0.6A<br>Output: DC 48V, 0.3A, 24W<br>Factory: Risunic Technology (ShenZhen) Co., Ltd. |
| Remark: This product assembles multi-transmitter modules: |                                                                                                                                           |



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- LTE Module (FCC ID: XMR201807EG95NA, IC: 10224A-2018EG95NA)
- Wi-Fi Module (FCC ID: 2AF6B-RAK634, IC: 25908-RAK634)
- LoRa Concentrator Module (FCC ID: 2AF6B-RAK5146, IC: 25908-RAK5146)

### Technical Specification of LTE Module

| Characteristic                 | Description                                        |
|--------------------------------|----------------------------------------------------|
| Operating Frequency            | WCDMA Band: II, IV, V<br>LTE Band: 2, 4, 5, 12, 13 |
| Type of Modulation             | QPSK, 16QAM                                        |
| Power Class                    | 4                                                  |
| Antenna Number:                | 2 (1 for MAIN, 1 for DIV)                          |
| Antenna Gain:                  | 3dBi (declared by client)                          |
| Model of contained LTE module: | EG95-NA                                            |
| FCC ID                         | XMR201807EG95NA                                    |
| IC ID                          | 10224A-2018EG95NA                                  |

### Technical Specification of Wi-Fi Module

| Characteristic                   | Description                                                                                      |
|----------------------------------|--------------------------------------------------------------------------------------------------|
| Operating Frequency              | 2412 - 2462 MHz for 802.11b/g/n(HT20)<br>2422 - 2452 MHz for 802.11n(HT40)                       |
| Type of Modulation               | DSSS(DBPSK/DQPSK/CCK)<br>OFDM(BPSK/QPSK/16QAM/64QAM)                                             |
| Data Rate:                       | 1/2/5.5/11 Mbps for 802.11b<br>6/9/12/18/24/36/48/54 Mbps for 802.11g<br>MCS0 ~ MCS7 for 802.11n |
| Channel Number:                  | 11 channels for 802.11b/g/n(HT20)<br>7 channels for 802.11n(HT40)                                |
| Antenna Number:                  | 1                                                                                                |
| Antenna Gain:                    | 2.0dBi (declared by client)                                                                      |
| Model of contained Wi-Fi Module: | RAK634                                                                                           |
| FCC ID                           | 2AF6B-RAK634                                                                                     |
| IC ID                            | 25908-RAK634                                                                                     |

### Technical Specification of WisLink LPWAN Concentrator

| Characteristic                  | Description                                                                                                                                                                                                                          |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Operating Frequency             | 923.3 - 927.5MHz for DTS LoRa<br>903.9 - 905.3MHz for Hybrid LoRa                                                                                                                                                                    |
| Type of Modulation              | FSK/Lora                                                                                                                                                                                                                             |
| Data Rate:                      | Lora: SF7 – SF12 / DR8 – DR13, SF7 – SF10 / DR0 –DR3                                                                                                                                                                                 |
| Antenna Number:                 | 1                                                                                                                                                                                                                                    |
| Antenna Gain:                   | Fiberglass Antenna (M/N: RAKARG12) with 3dBi, or<br>Fiberglass Antenna (M/N: RAKARG19) with 5.1dBi, or<br>Fiberglass Antenna (M/N: RAKARG14) with 5.8dBi, or<br>Fiberglass Antenna (M/N: RAKARG15) with 8dBi<br>(declared by client) |
| Model of contained Lora Module: | RAK5146                                                                                                                                                                                                                              |
| FCC ID                          | 2AF6B-RAK5146                                                                                                                                                                                                                        |
| IC ID                           | 25908-RAK5146                                                                                                                                                                                                                        |

## 3.3 Independent Operation Modes

The basic operation modes are:

- A. On, 2.4G WIFI + WCDMA + LoRa
- B. On, 2.4G WIFI + LTE + LoRa

### 3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

### 3.5 Submitted Documents

- Block Diagram
- Photo Document
- Schematics
- User Manual

## 4 Test Set-up and Operation Modes

### 4.1 Principle of Configuration Selection

**Radio Spectrum:** The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

**Emission:** The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

### 4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5. All tests were performed according to the procedures in ANSI C63.10.

Note: The test standard for frequency Bands 698-756 MHz and 777-787 MHz in LTE module is RSS-130 issue 1 and the essential requirements remain unchanged in the updated version RSS-130 issue 2, hence it has been updated in current test report without additional test.

### 4.3 Special Accessories and Auxiliary Equipment

Table 3: List of Accessories and Auxiliary Equipment

| Description                         | Manufacturer    | Model No.     | Serial Number or Rating |
|-------------------------------------|-----------------|---------------|-------------------------|
| Wideband Radio Communication Tester | Rohde & Schwarz | CMW500        | 166305                  |
| Portable Laptop                     | Lenovo          | ThinkPad T480 | 10Q67059                |

### 4.4 Countermeasures to Achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF).

No additional measures were employed to achieve compliance.

### 4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test (Below 1GHz)

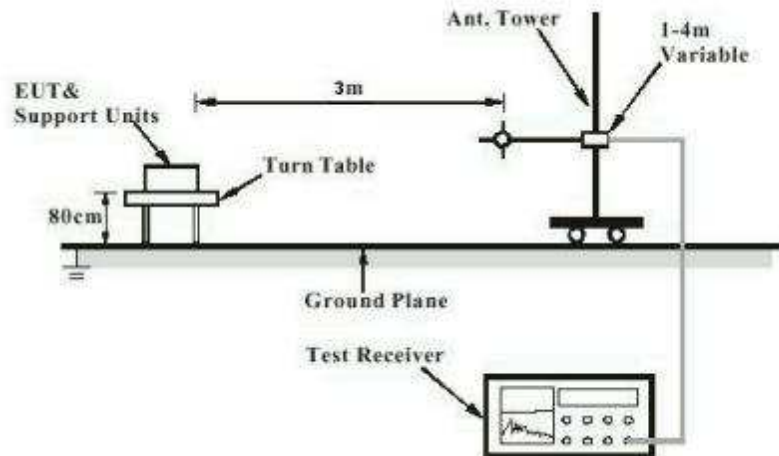


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

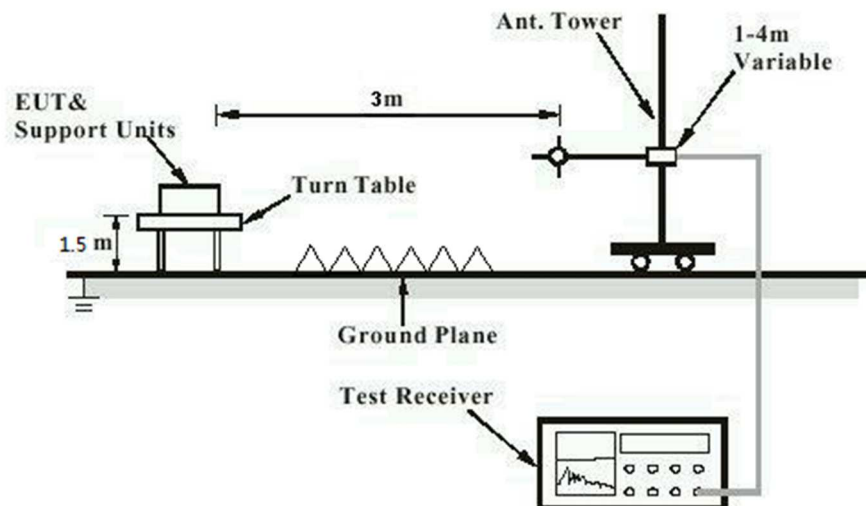
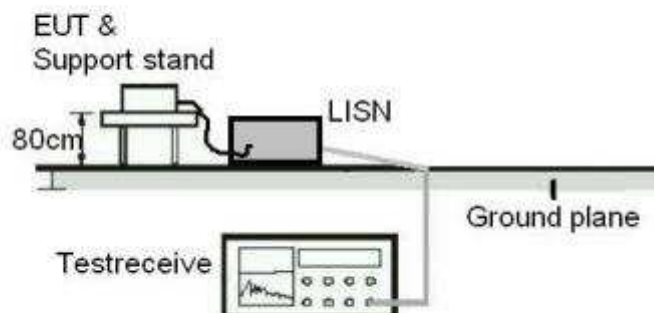


Diagram of Measurement Configuration for Mains Conduction Measurement



## 5 Test Results

### 5.1 Radiated Spurious Emissions

**RESULT:**

**Pass**

#### Test Specification

|                   |   |                                                                                                                                                                                                           |
|-------------------|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Test standard     | : | CFR47 FCC Part 15: Subpart C Section 15.247<br>CFR47 FCC Part 22<br>CFR47 FCC Part 24<br>CFR47 FCC Part 27<br>RSS-247 Issue 3<br>RSS-130 Issue 2<br>RSS-132 Issue 3<br>RSS-133 Issue 6<br>RSS-139 Issue 3 |
| Basic standard    | : | ANSI C63.10 & ANSI C63.26                                                                                                                                                                                 |
| Limit             | : | KDB 996369 D04<br>The emissions not exceed the highest limit.                                                                                                                                             |
| Kind of test site | : | 3m Semi-anechoic Chamber                                                                                                                                                                                  |

#### Test Setup

|                      |   |                         |
|----------------------|---|-------------------------|
| Date of testing      | : | 2025-01-06 - 2025-04-10 |
| Input voltage        | : | AC 120V, 60Hz           |
| Operation mode       | : | A, B                    |
| Earthing             | : | Not Connected           |
| Ambient temperature  | : | Refer to test data      |
| Relative humidity    | : | Refer to test data      |
| Atmospheric pressure | : | 101 kPa                 |

Note: The test plots of Co-located radiated spurious emissions beyond the limit are the fundamental radio frequency of Lora, Wi-Fi and LTE.  
For the measurement records, refer to the following plots, only the worst case mode are shown in this report.

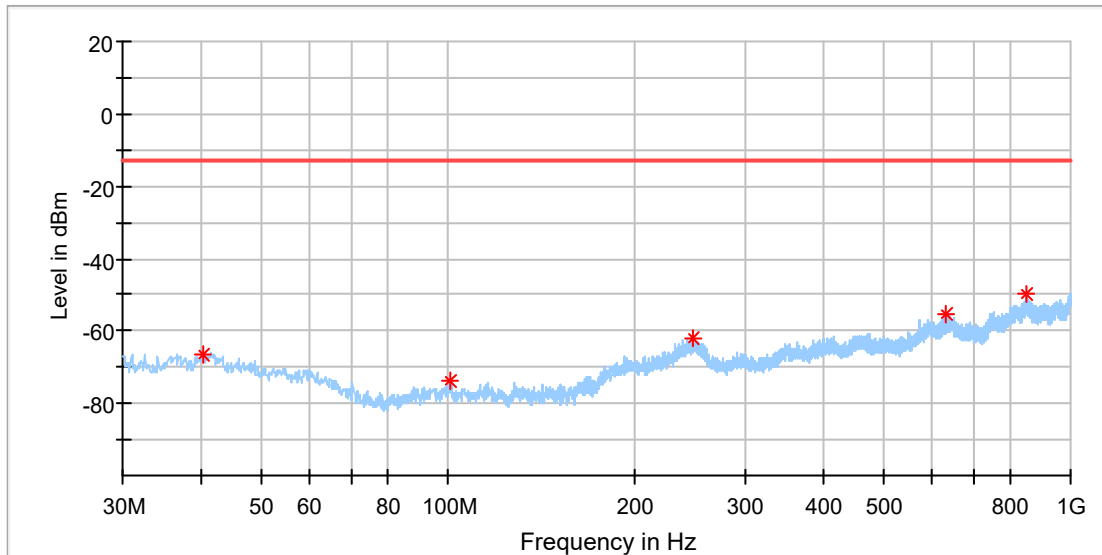
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### 5.1.1 For WCDMA

## EUT Information

|                     |                               |
|---------------------|-------------------------------|
| EUT Name:           | WisGate Edge Prime            |
| Model:              | RAK7240CV2                    |
| Test Mode:          | WCDMA II_RMC12.2K_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002      |
| Test Voltage::      | AC 120V60Hz                   |
| Remark:             | Temp 24 Humi:50%              |
| Test Standard:      | FCC Part 24                   |
| Tested By:          | Kei Zhang                     |
| Reviewed By:        | Terry Yin                     |



## Critical\_Freqs

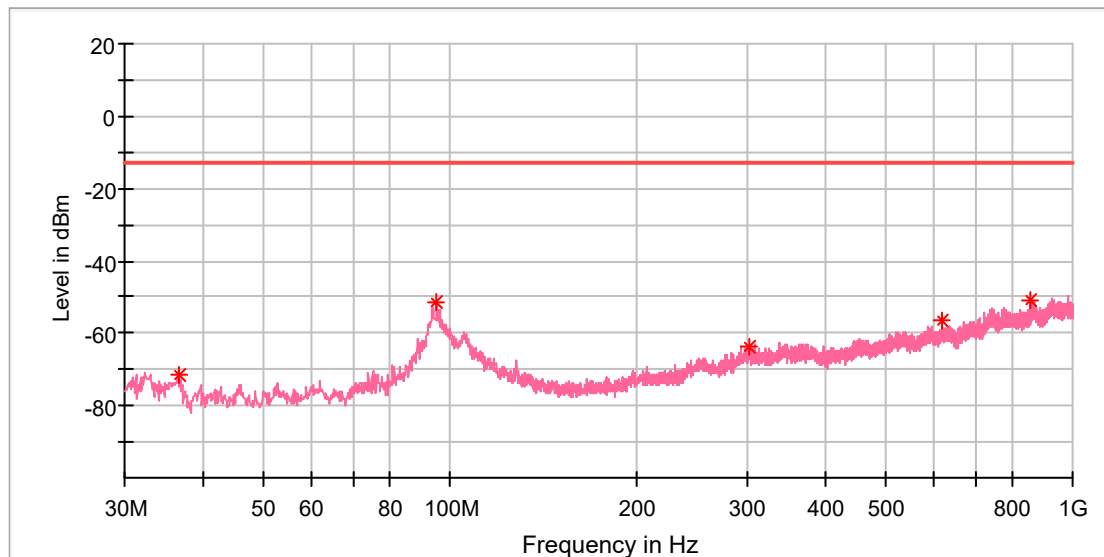
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 40.427500       | -66.26        | -13.00      | 53.26       | 100.0       | H   | 154.0         | -113.0     |
| 101.052500      | -73.94        | -13.00      | 60.94       | 100.0       | H   | 103.0         | -121.1     |
| 246.673750      | -61.96        | -13.00      | 48.96       | 100.0       | H   | 232.0         | -110.0     |
| 630.308750      | -55.58        | -13.00      | 42.58       | 100.0       | H   | 295.0         | -104.8     |
| 847.467500      | -49.88        | -13.00      | 36.88       | 100.0       | H   | 171.0         | -100.1     |

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## EUT Information

EUT Name: WisGate Edge Prime  
Model: RAK7240CV2  
Test Mode: WCDMA II\_RMC12.2K\_Mid channel  
Order No/Sample No: 168520158/A003893351-002  
Test Voltage:: AC 120V60Hz  
Remark: Temp 24 Humi:50%  
Test Standard: FCC Part 24  
Tested By: Kei Zhang  
Reviewed By: Terry Yin



## Critical\_Freqs

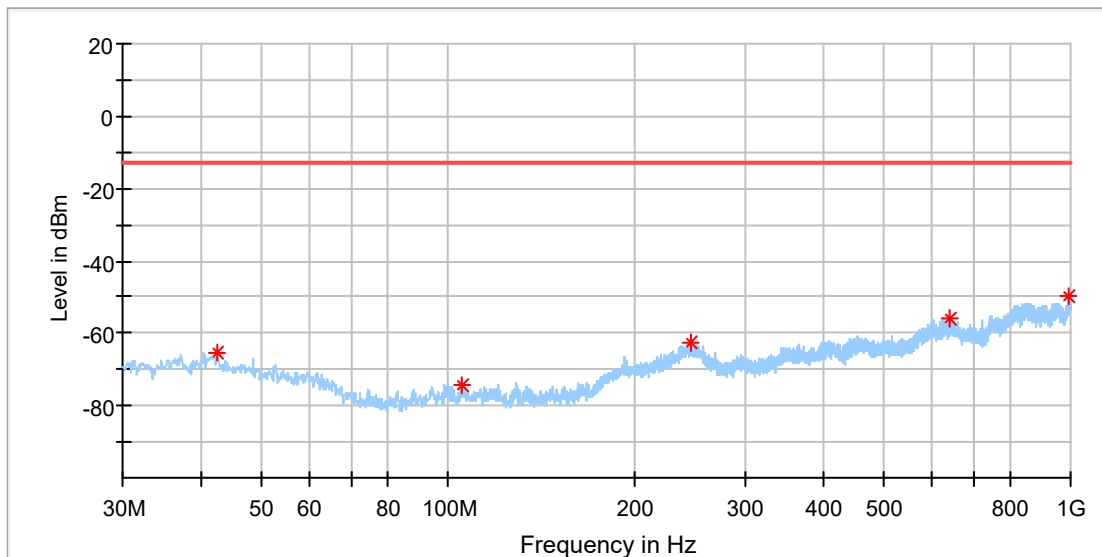
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 36.668750       | -71.32        | -13.00      | 58.32       | 100.0       | V   | 18.0          | -125.6     |
| 95.111250       | -51.53        | -13.00      | 38.53       | 100.0       | V   | 214.0         | -99.8      |
| 302.933750      | -63.56        | -13.00      | 50.56       | 100.0       | V   | 31.0          | -111.0     |
| 616.001250      | -56.73        | -13.00      | 43.73       | 100.0       | V   | 106.0         | -106.6     |
| 858.501250      | -50.95        | -13.00      | 37.95       | 100.0       | V   | 0.0           | -100.8     |

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## EUT Information

EUT Name: WisGate Edge Prime  
Model: RAK7240CV2  
Test Mode: WCDMA IV\_RMC12.2K\_Mid channel  
Order No/Sample No: 168520158/A003893351-002  
Test Voltage:: AC 120V60Hz  
Remark: Temp 24 Humi:50%  
Test Standard: FCC Part 27  
Tested By: Kei Zhang  
Reviewed By: Terry Yin



## Critical\_Freqs

| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 42.488750       | -65.41        | -13.00      | 52.41       | 100.0       | H   | 205.0         | -112.7     |
| 105.660000      | -74.17        | -13.00      | 61.17       | 100.0       | H   | 79.0          | -121.4     |
| 244.733750      | -62.54        | -13.00      | 49.54       | 100.0       | H   | 124.0         | -110.0     |
| 641.827500      | -55.72        | -13.00      | 42.72       | 100.0       | H   | 135.0         | -104.4     |
| 994.301250      | -49.62        | -13.00      | 36.62       | 100.0       | H   | 324.0         | -99.2      |

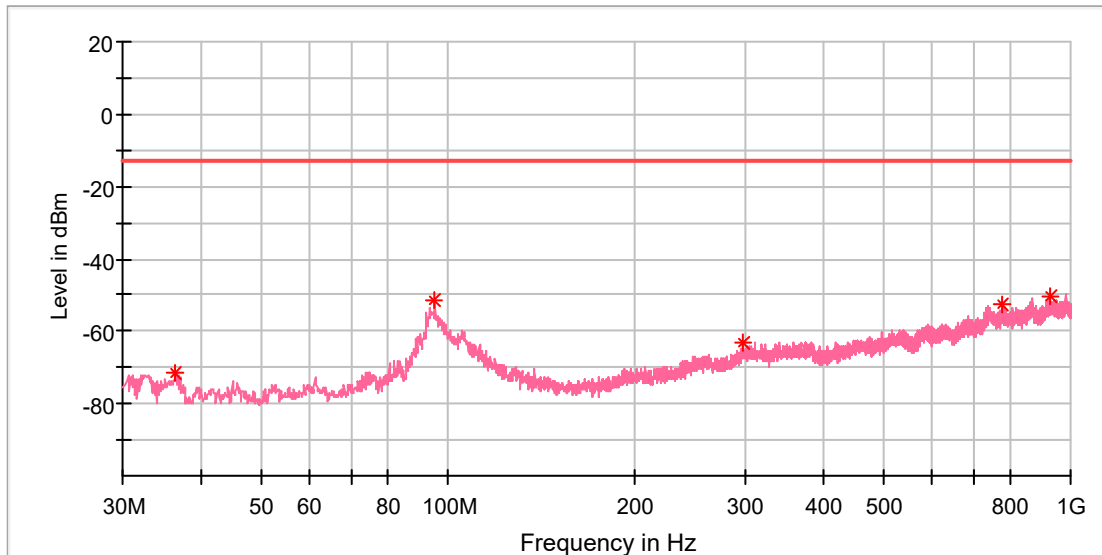


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## EUT Information

|                     |                               |
|---------------------|-------------------------------|
| EUT Name:           | WisGate Edge Prime            |
| Model:              | RAK7240CV2                    |
| Test Mode:          | WCDMA IV_RMC12.2K_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002      |
| Test Voltage::      | AC 120V/60Hz                  |
| Remark:             | Temp 24 Humi:50%              |
| Test Standard:      | FCC Part 27                   |
| Tested By:          | Kei Zhang                     |
| Reviewed By:        | Terry Yin                     |



## Critical\_Freqs

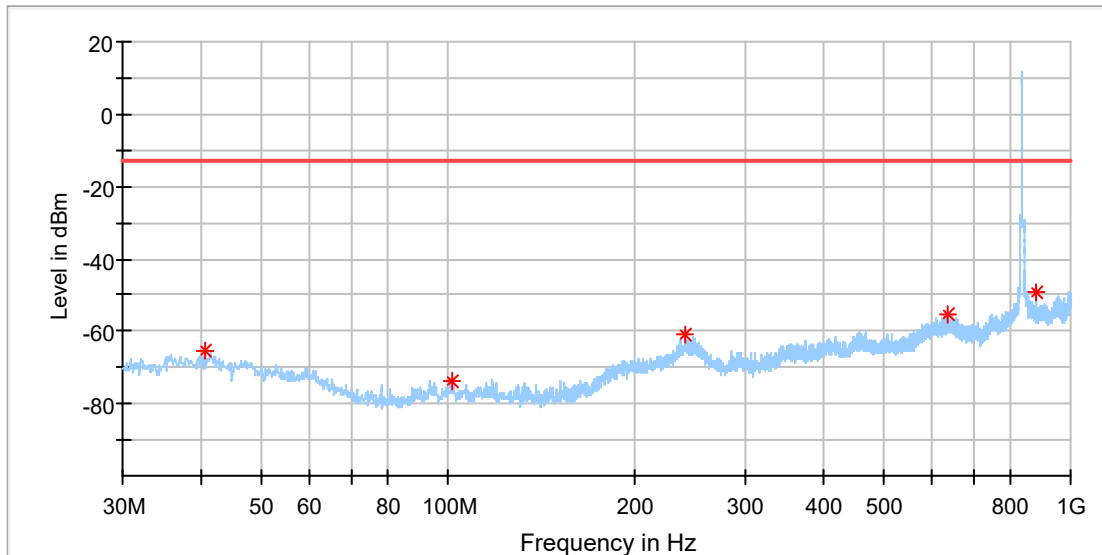
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 36.426250       | -71.38        | -13.00      | 58.38       | 100.0       | V   | 33.0          | -125.6     |
| 95.111250       | -51.19        | -13.00      | 38.19       | 100.0       | V   | 106.0         | -99.8      |
| 298.447500      | -63.29        | -13.00      | 50.29       | 100.0       | V   | 199.0         | -111.3     |
| 777.627500      | -52.77        | -13.00      | 39.77       | 100.0       | V   | 343.0         | -102.1     |
| 929.068750      | -50.47        | -13.00      | 37.47       | 100.0       | V   | 174.0         | -99.9      |

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## EUT Information

|                     |                              |
|---------------------|------------------------------|
| EUT Name:           | WisGate Edge Prime           |
| Model:              | RAK7240CV2                   |
| Test Mode:          | WCDMA V_RMC12.2K_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002     |
| Test Voltage::      | AC 120V/60Hz                 |
| Remark:             | Temp 24 Humi:50%             |
| Test Standard:      | FCC Part 22                  |
| Tested By:          | Kei Zhang                    |
| Reviewed By:        | Terry Yin                    |



## Critical\_Freqs

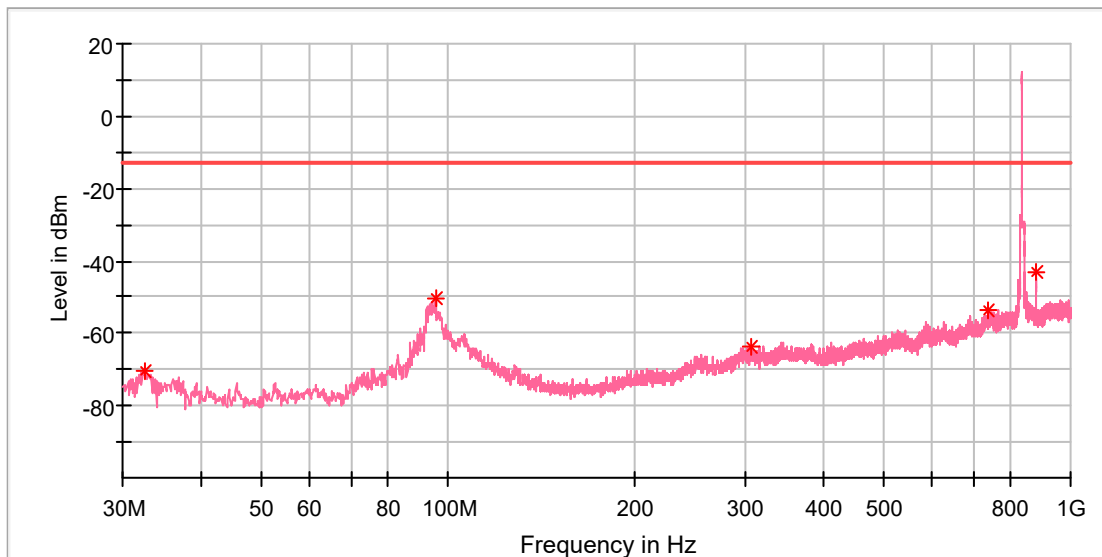
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 40.670000       | -65.26        | -13.00      | 52.26       | 100.0       | H   | 272.0         | -112.7     |
| 101.416250      | -73.62        | -13.00      | 60.62       | 100.0       | H   | 299.0         | -121.4     |
| 240.611250      | -60.96        | -13.00      | 47.96       | 100.0       | H   | 222.0         | -110.4     |
| 635.765000      | -55.33        | -13.00      | 42.33       | 100.0       | H   | 187.0         | -104.6     |
| 880.447500      | -49.02        | -13.00      | 36.02       | 100.0       | H   | 335.0         | -102.0     |

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## EUT Information

EUT Name: WisGate Edge Prime  
Model: RAK7240CV2  
Test Mode: WCDMA V\_RMC12.2K\_Mid channel  
Order No/Sample No: 168520158/A003893351-002  
Test Voltage:: AC 120V/60Hz  
Remark: Temp 24 Humi:50%  
Test Standard: FCC Part 22  
Tested By: Kei Zhang  
Reviewed By: Terry Yin



## Critical\_Freqs

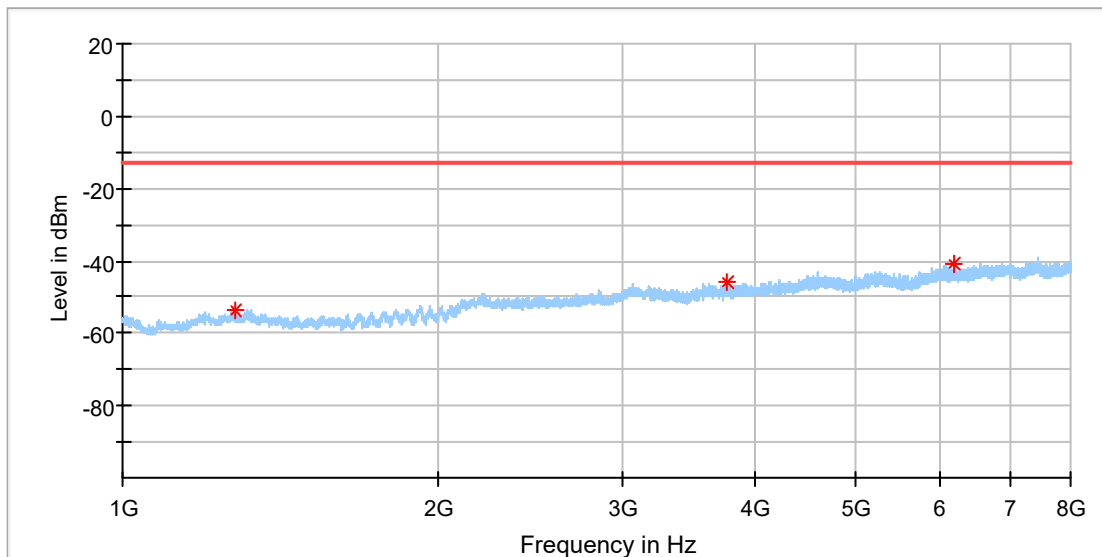
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 32.546250       | -70.21        | -13.00      | 57.21       | 100.0       | V   | 61.0          | -128.9     |
| 95.353750       | -50.34        | -13.00      | 37.34       | 100.0       | V   | 119.0         | -100.2     |
| 306.450000      | -63.73        | -13.00      | 50.73       | 100.0       | V   | 12.0          | -111.0     |
| 737.857500      | -53.91        | -13.00      | 40.91       | 100.0       | V   | 355.0         | -101.8     |
| 882.387500      | -43.21        | -13.00      | 30.21       | 100.0       | V   | 245.0         | -102.5     |

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## EUT Information

|                     |                               |
|---------------------|-------------------------------|
| EUT Name:           | WisGate Edge Prime            |
| Model:              | RAK7240CV2                    |
| Test Mode:          | WCDMA II_RMC12.2K_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002      |
| Test Voltage::      | AC 120V/60Hz                  |
| Remark:             | Temp 24 Humi:50%              |
| Test Standard:      | FCC Part 24                   |
| Tested By:          | Kei Zhang                     |
| Reviewed By:        | Terry Yin                     |



## Critical\_Freqs

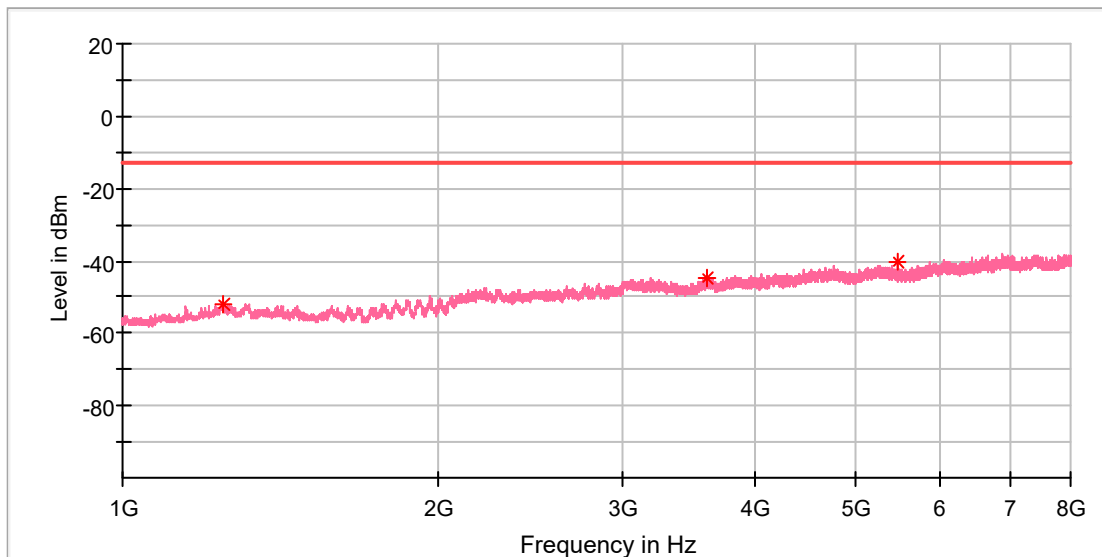
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 1280.000000     | -53.80        | -13.00      | 40.80       | 150.0       | H   | 139.0         | -92.6      |
| 3769.000000     | -45.85        | -13.00      | 32.85       | 150.0       | H   | 165.0         | -85.4      |
| 6183.000000     | -40.79        | -13.00      | 27.79       | 150.0       | H   | 57.0          | -80.5      |

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## EUT Information

|                     |                               |
|---------------------|-------------------------------|
| EUT Name:           | WisGate Edge Prime            |
| Model:              | RAK7240CV2                    |
| Test Mode:          | WCDMA II_RMC12.2K_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002      |
| Test Voltage::      | AC 120V/60Hz                  |
| Remark:             | Temp 24 Humi:50%              |
| Test Standard:      | FCC Part 24                   |
| Tested By:          | Kei Zhang                     |
| Reviewed By:        | Terry Yin                     |



## Critical\_Freqs

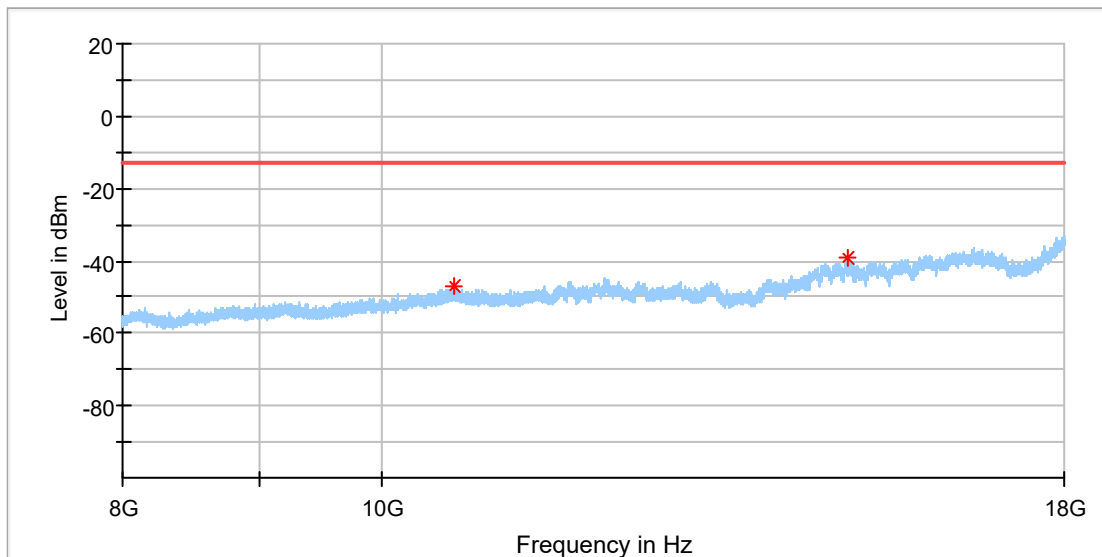
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 1246.500000     | -51.88        | -13.00      | 38.88       | 150.0       | V   | 332.0         | -89.9      |
| 3600.000000     | -44.56        | -13.00      | 31.56       | 150.0       | V   | 127.0         | -83.7      |
| 5480.500000     | -40.42        | -13.00      | 27.42       | 150.0       | V   | 153.0         | -80.8      |

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## EUT Information

EUT Name: WisGate Edge Prime  
Model: RAK7240CV2  
Test Mode: WCDMA II\_RMC12.2K\_Mid channel  
Order No/Sample No: 168520158/A003893351-002  
Test Voltage:: AC 120V/60Hz  
Remark: Temp 24 Humi:50%  
Test Standard: FCC Part 24  
Tested By: Kei Zhang  
Reviewed By: Terry Yin



## Critical\_Freqs

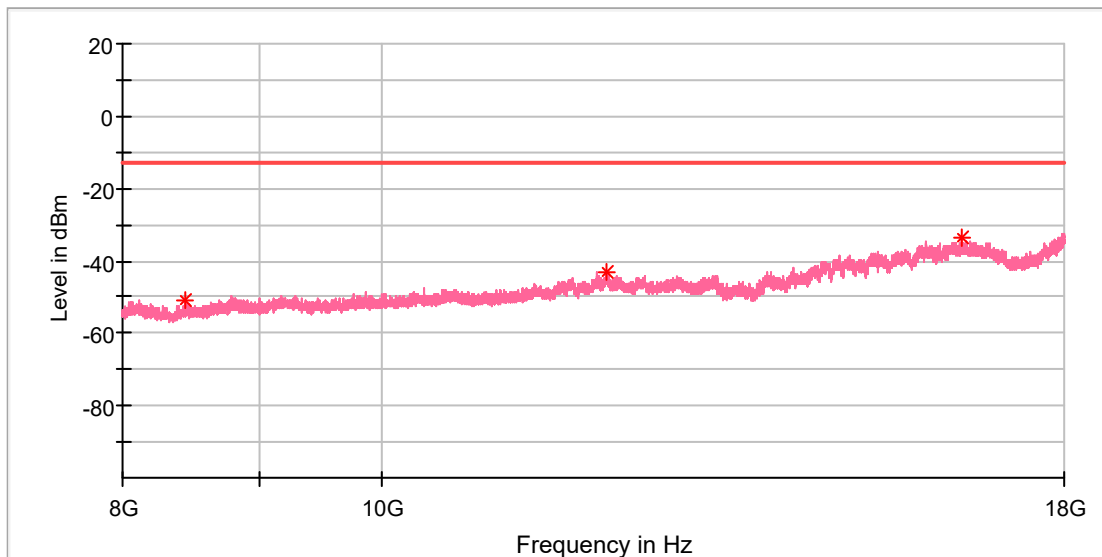
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 10639.000000    | -46.95        | -13.00      | 33.95       | 150.0       | H   | 153.0         | -82.7      |
| 14925.500000    | -39.43        | -13.00      | 26.43       | 150.0       | H   | 317.0         | -75.8      |

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## EUT Information

EUT Name: WisGate Edge Prime  
Model: RAK7240CV2  
Test Mode: WCDMA II\_RMC12.2K\_Mid channel  
Order No/Sample No: 168520158/A003893351-002  
Test Voltage:: AC 120V/60Hz  
Remark: Temp 24 Humi:50%  
Test Standard: FCC Part 24  
Tested By: Kei Zhang  
Reviewed By: Terry Yin



## Critical\_Freqs

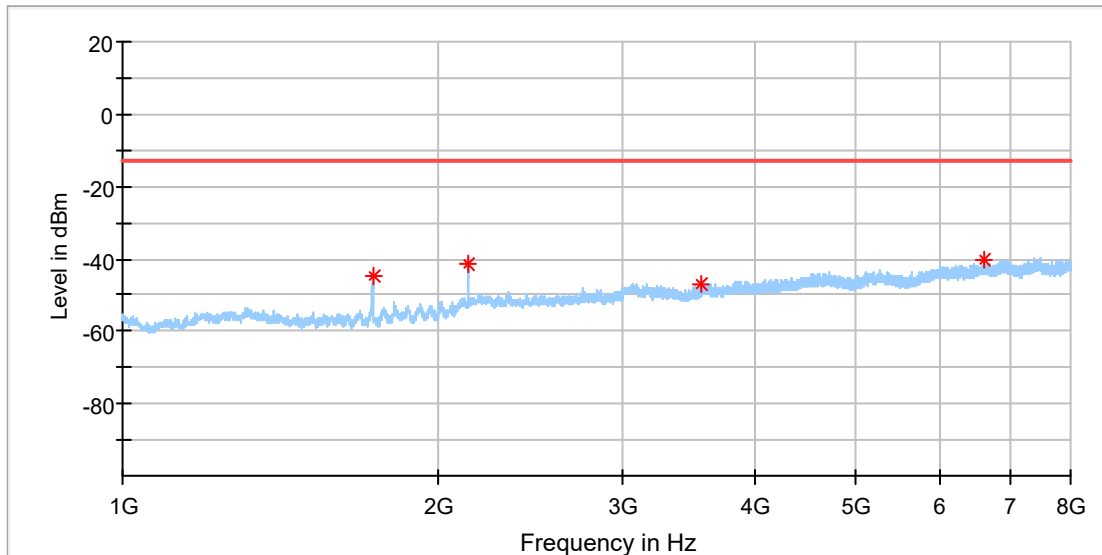
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 8438.000000     | -50.64        | -13.00      | 37.64       | 150.0       | V   | 312.0         | -86.7      |
| 12134.500000    | -42.83        | -13.00      | 29.83       | 150.0       | V   | 282.0         | -78.0      |
| 16476.500000    | -33.72        | -13.00      | 20.72       | 150.0       | V   | 184.0         | -70.8      |

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## EUT Information

|                     |                               |
|---------------------|-------------------------------|
| EUT Name:           | WisGate Edge Prime            |
| Model:              | RAK7240CV2                    |
| Test Mode:          | WCDMA IV_RMC12.2K_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002      |
| Test Voltage::      | AC 120V/60Hz                  |
| Remark:             | Temp 24 Humi:50%              |
| Test Standard:      | FCC Part 27                   |
| Tested By:          | Kei Zhang                     |
| Reviewed By:        | Terry Yin                     |



## Critical Freqs

| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 1731.000000     | -44.97        | -13.00      | 31.97       | 150.0       | H   | 355.0         | -91.8      |
| 2132.000000     | -41.50        | -13.00      | 28.50       | 150.0       | H   | 273.0         | -88.8      |
| 3560.000000     | -46.88        | -13.00      | 33.88       | 150.0       | H   | 127.0         | -86.1      |
| 6624.500000     | -40.17        | -13.00      | 27.17       | 150.0       | H   | 106.0         | -79.6      |

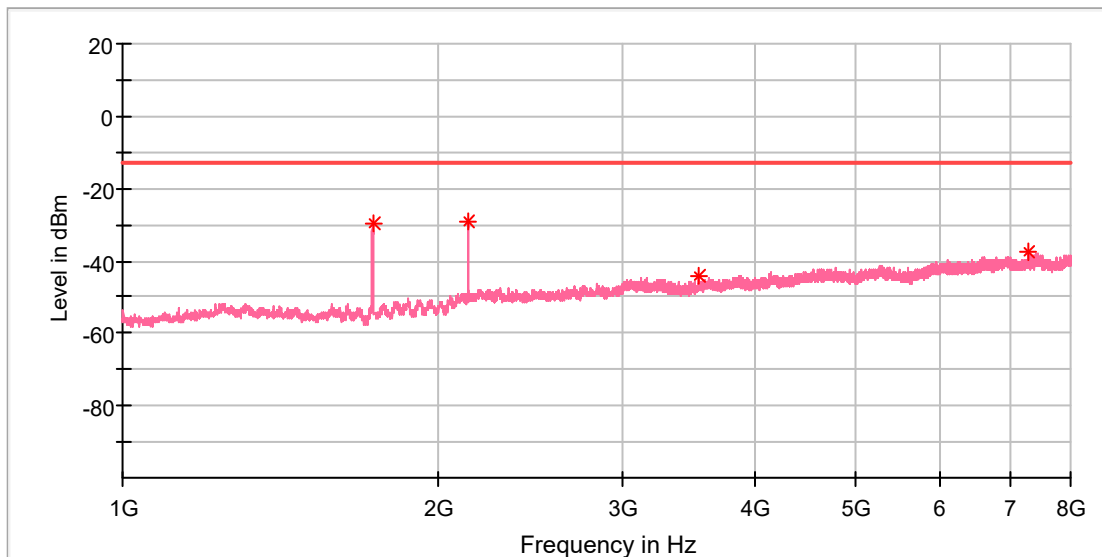


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## EUT Information

|                     |                               |
|---------------------|-------------------------------|
| EUT Name:           | WisGate Edge Prime            |
| Model:              | RAK7240CV2                    |
| Test Mode:          | WCDMA IV_RMC12.2K_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002      |
| Test Voltage::      | AC 120V/60Hz                  |
| Remark:             | Temp 24 Humi:50%              |
| Test Standard:      | FCC Part 27                   |
| Tested By:          | Kei Zhang                     |
| Reviewed By:        | Terry Yin                     |



## Critical\_Freqs

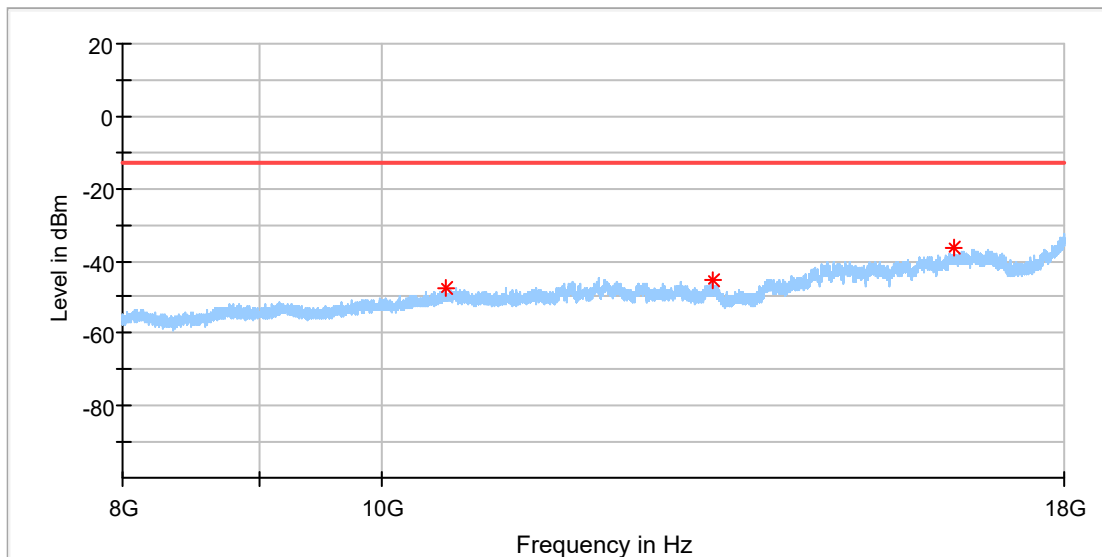
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 1731.500000     | -29.61        | -13.00      | 16.61       | 150.0       | V   | 101.0         | -89.9      |
| 2132.000000     | -29.32        | -13.00      | 16.32       | 150.0       | V   | 325.0         | -86.6      |
| 3540.500000     | -44.20        | -13.00      | 31.20       | 150.0       | V   | 333.0         | -84.4      |
| 7295.000000     | -37.33        | -13.00      | 24.33       | 150.0       | V   | 312.0         | -76.5      |

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## EUT Information

|                     |                               |
|---------------------|-------------------------------|
| EUT Name:           | WisGate Edge Prime            |
| Model:              | RAK7240CV2                    |
| Test Mode:          | WCDMA IV_RMC12.2K_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002      |
| Test Voltage::      | AC 120V/60Hz                  |
| Remark:             | Temp 24 Humi:50%              |
| Test Standard:      | FCC Part 27                   |
| Tested By:          | Kei Zhang                     |
| Reviewed By:        | Terry Yin                     |



## Critical\_Freqs

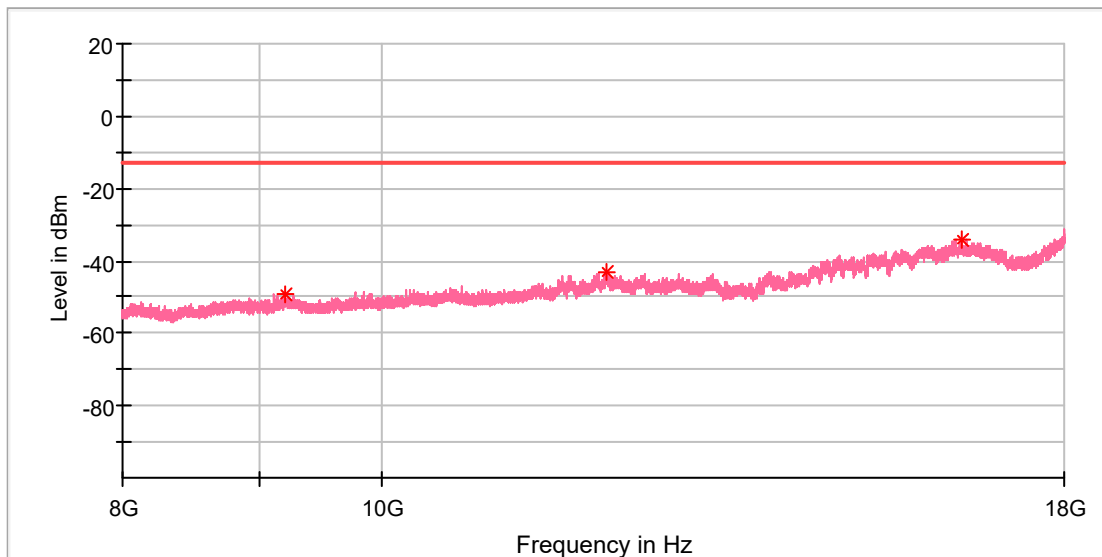
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 10560.500000    | -47.70        | -13.00      | 34.70       | 150.0       | H   | 241.0         | -82.5      |
| 13294.000000    | -45.29        | -13.00      | 32.29       | 150.0       | H   | 226.0         | -80.7      |
| 16360.500000    | -36.18        | -13.00      | 23.18       | 150.0       | H   | 6.0           | -73.5      |

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## EUT Information

|                     |                               |
|---------------------|-------------------------------|
| EUT Name:           | WisGate Edge Prime            |
| Model:              | RAK7240CV2                    |
| Test Mode:          | WCDMA IV_RMC12.2K_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002      |
| Test Voltage::      | AC 120V/60Hz                  |
| Remark:             | Temp 24 Humi:50%              |
| Test Standard:      | FCC Part 27                   |
| Tested By:          | Kei Zhang                     |
| Reviewed By:        | Terry Yin                     |



## Critical\_Freqs

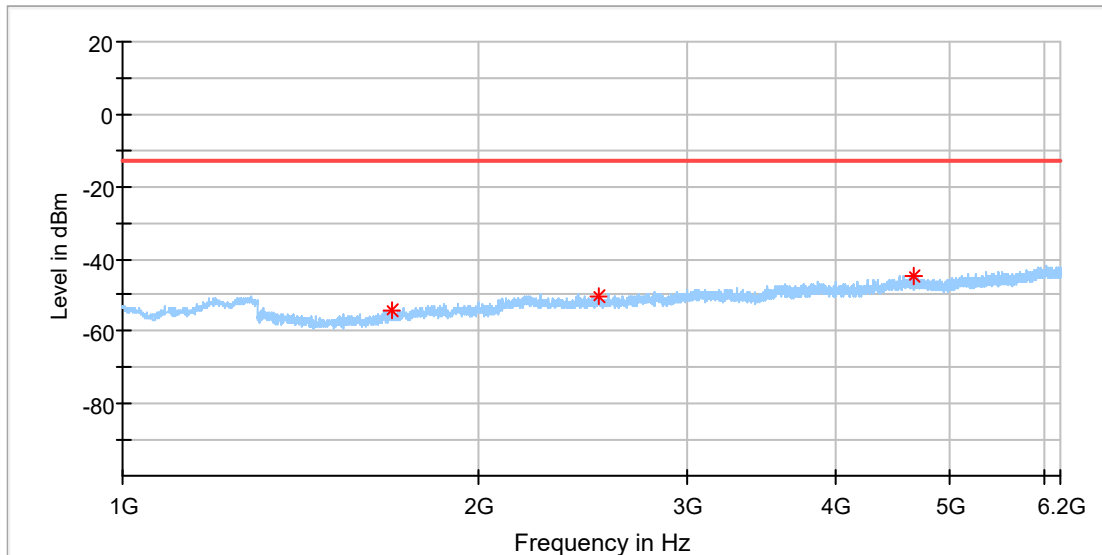
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 9200.000000     | -49.41        | -13.00      | 36.41       | 150.0       | V   | 232.0         | -84.0      |
| 12140.500000    | -43.01        | -13.00      | 30.01       | 150.0       | V   | 281.0         | -77.9      |
| 16471.000000    | -34.08        | -13.00      | 21.08       | 150.0       | V   | 255.0         | -70.8      |

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## EUT Information

|                     |                              |
|---------------------|------------------------------|
| EUT Name:           | WisGate Edge Prime           |
| Model:              | RAK7240CV2                   |
| Test Mode:          | WCDMA V_RMC12.2K_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002     |
| Test Voltage::      | AC 120V/60Hz                 |
| Remark:             | Temp 24 Humi:50%             |
| Test Standard:      | FCC Part 22                  |
| Tested By:          | Kei Zhang                    |
| Reviewed By:        | Terry Yin                    |



## Critical Freqs

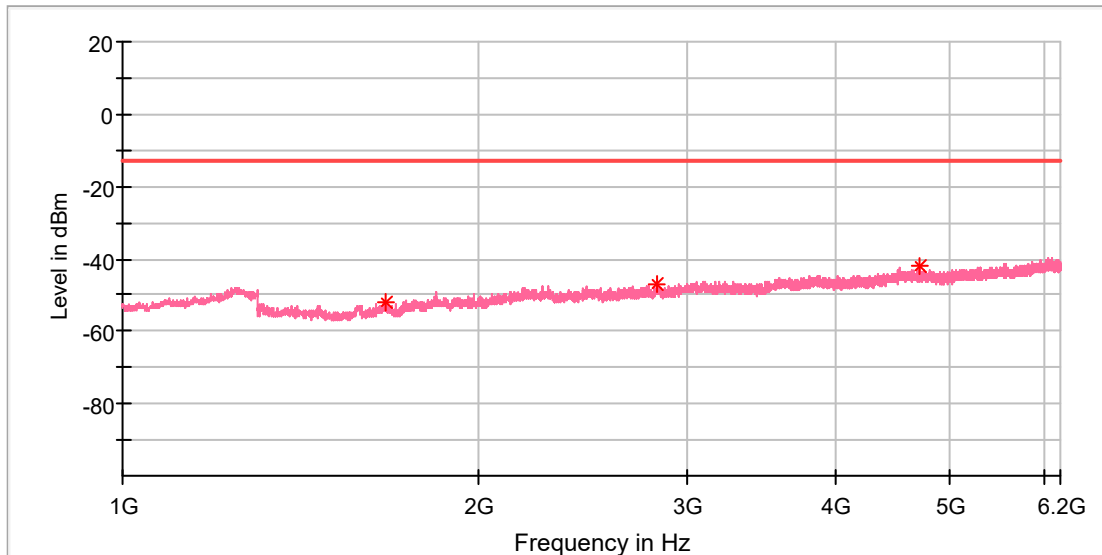
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 1691.000000     | -54.01        | -13.00      | 41.01       | 150.0       | H   | 342.0         | -92.2      |
| 2520.000000     | -50.44        | -13.00      | 37.44       | 150.0       | H   | 51.0          | -88.5      |
| 4661.000000     | -44.61        | -13.00      | 31.62       | 150.0       | H   | 154.0         | -83.7      |

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## EUT Information

|                     |                              |
|---------------------|------------------------------|
| EUT Name:           | WisGate Edge Prime           |
| Model:              | RAK7240CV2                   |
| Test Mode:          | WCDMA V_RMC12.2K_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002     |
| Test Voltage::      | AC 120V/60Hz                 |
| Remark:             | Temp 24 Humi:50%             |
| Test Standard:      | FCC Part 22                  |
| Tested By:          | Kei Zhang                    |
| Reviewed By:        | Terry Yin                    |



## Critical\_Freqs

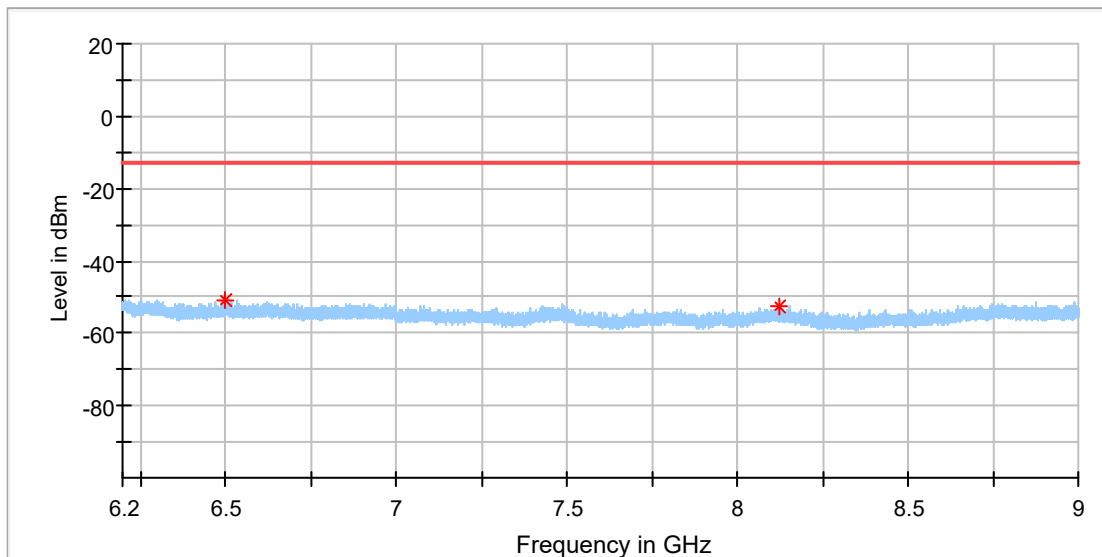
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 1671.000000     | -51.87        | -13.00      | 38.87       | 150.0       | V   | 284.0         | -90.5      |
| 2832.000000     | -46.75        | -13.00      | 33.75       | 150.0       | V   | 318.0         | -85.5      |
| 4717.000000     | -42.21        | -13.00      | 29.21       | 150.0       | V   | 46.0          | -81.7      |

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## EUT Information

|                     |                              |
|---------------------|------------------------------|
| EUT Name:           | WisGate Edge Prime           |
| Model:              | RAK7240CV2                   |
| Test Mode:          | WCDMA V_RMC12.2K_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002     |
| Test Voltage::      | AC 120V/60Hz                 |
| Remark:             | Temp 24 Humi:50%             |
| Test Standard:      | FCC Part 22                  |
| Tested By:          | Kei Zhang                    |
| Reviewed By:        | Terry Yin                    |



## Critical\_Freqs

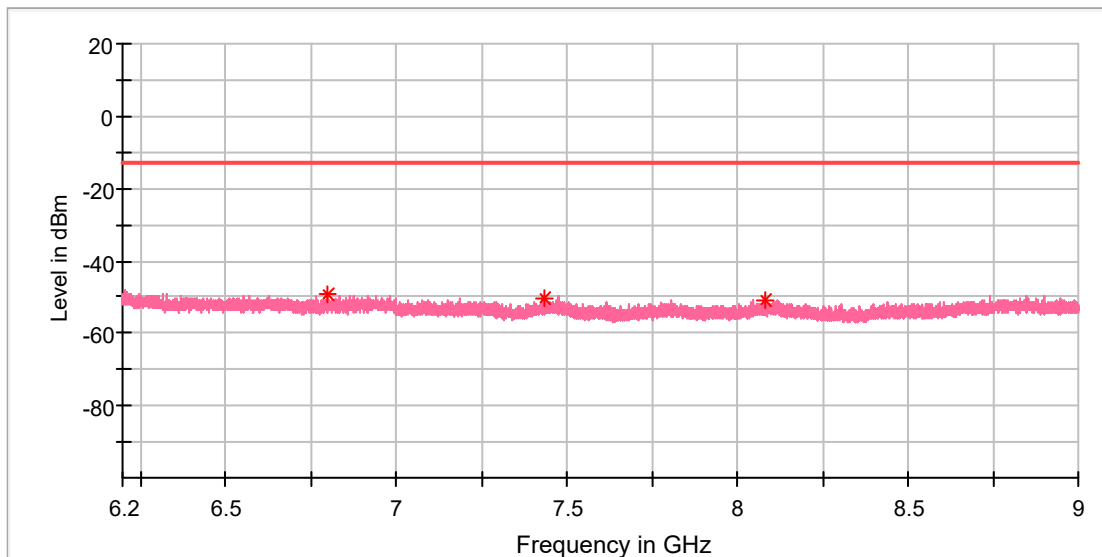
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 6497.966667     | -50.91        | -13.00      | 37.91       | 150.0       | H   | 0.0           | -88.6      |
| 8121.033333     | -52.45        | -13.00      | 39.45       | 150.0       | H   | 227.0         | -88.4      |

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## EUT Information

|                     |                              |
|---------------------|------------------------------|
| EUT Name:           | WisGate Edge Prime           |
| Model:              | RAK7240CV2                   |
| Test Mode:          | WCDMA V_RMC12.2K_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002     |
| Test Voltage::      | AC 120V/60Hz                 |
| Remark:             | Temp 24 Humi:50%             |
| Test Standard:      | FCC Part 22                  |
| Tested By:          | Kei Zhang                    |
| Reviewed By:        | Terry Yin                    |



## Critical\_Freqs

| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 6802.933333     | -49.14        | -13.00      | 36.14       | 150.0       | V   | 256.0         | -87.5      |
| 7436.666667     | -50.07        | -13.00      | 37.07       | 150.0       | V   | 38.0          | -86.5      |
| 8084.633333     | -50.84        | -13.00      | 37.84       | 150.0       | V   | 66.0          | -86.4      |

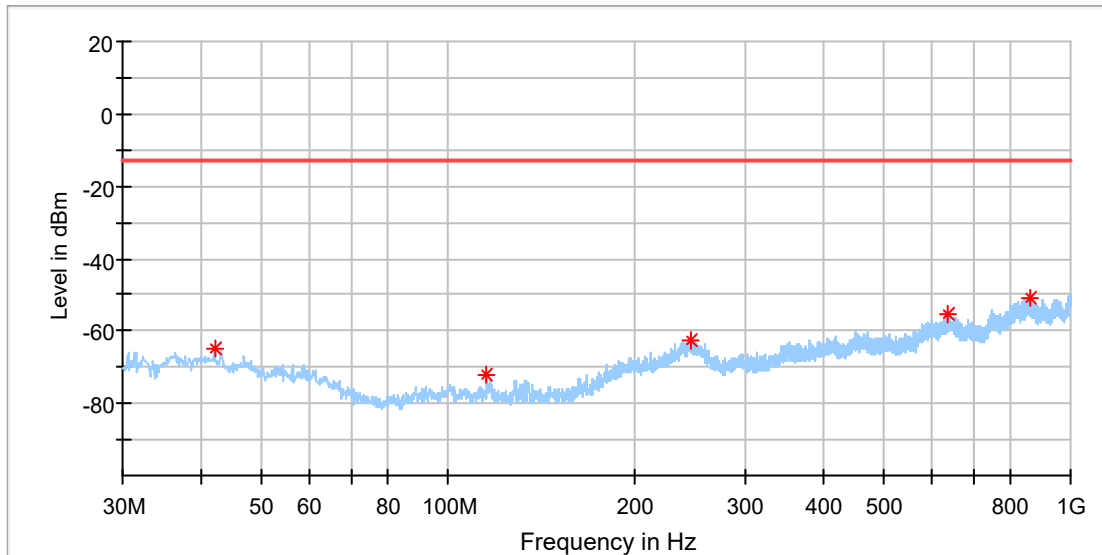
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## 5.1.2 For LTE

### EUT Information

|                     |                                  |
|---------------------|----------------------------------|
| EUT Name:           | WisGate Edge Prime               |
| Model:              | RAK7240CV2                       |
| Test Mode:          | LTE Band 2_1.4M_QPSK_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002         |
| Test Voltage::      | AC 120V/60Hz                     |
| Remark:             | Temp 24 Humi:50%                 |
| Test Standard:      | FCC Part 24                      |
| Tested By:          | Kei Zhang                        |
| Reviewed By:        | Terry Yin                        |



### Critical\_Freqs

| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 42.125000       | -65.06        | -13.00      | 52.06       | 100.0       | H   | 280.0         | -112.5     |
| 115.481250      | -72.06        | -13.00      | 59.06       | 100.0       | H   | 61.0          | -122.5     |
| 244.976250      | -62.50        | -13.00      | 49.50       | 100.0       | H   | 297.0         | -110.0     |
| 635.037500      | -55.28        | -13.00      | 42.28       | 100.0       | H   | 348.0         | -104.6     |
| 864.685000      | -50.69        | -13.00      | 37.69       | 100.0       | H   | 0.0           | -100.9     |

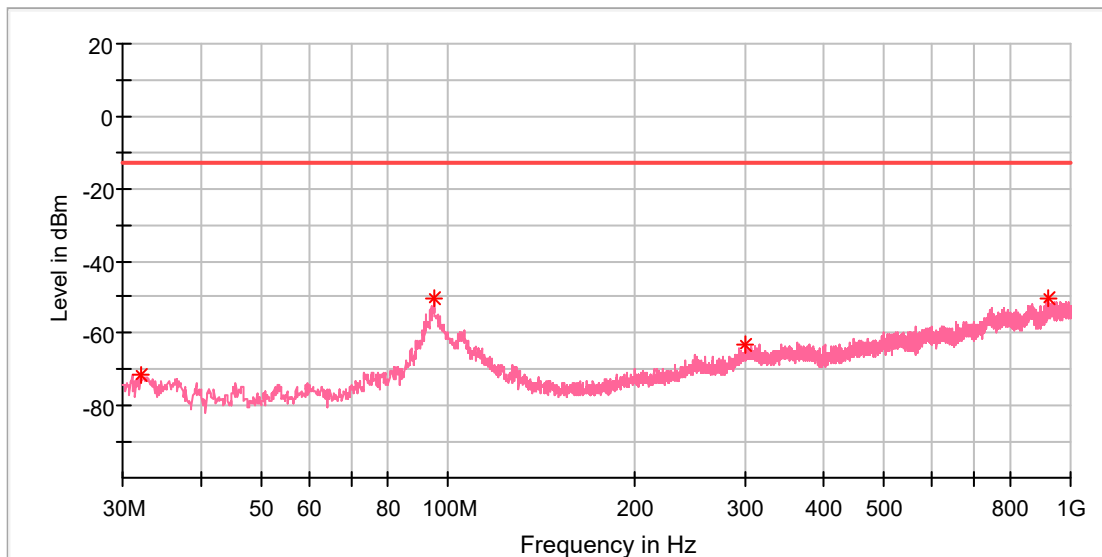


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## EUT Information

|                     |                                  |
|---------------------|----------------------------------|
| EUT Name:           | WisGate Edge Prime               |
| Model:              | RAK7240CV2                       |
| Test Mode:          | LTE Band 2_1.4M_QPSK_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002         |
| Test Voltage::      | AC 120V/60Hz                     |
| Remark:             | Temp 24 Humi:50%                 |
| Test Standard:      | FCC Part 24                      |
| Tested By:          | Kei Zhang                        |
| Reviewed By:        | Terry Yin                        |



## Critical\_Freqs

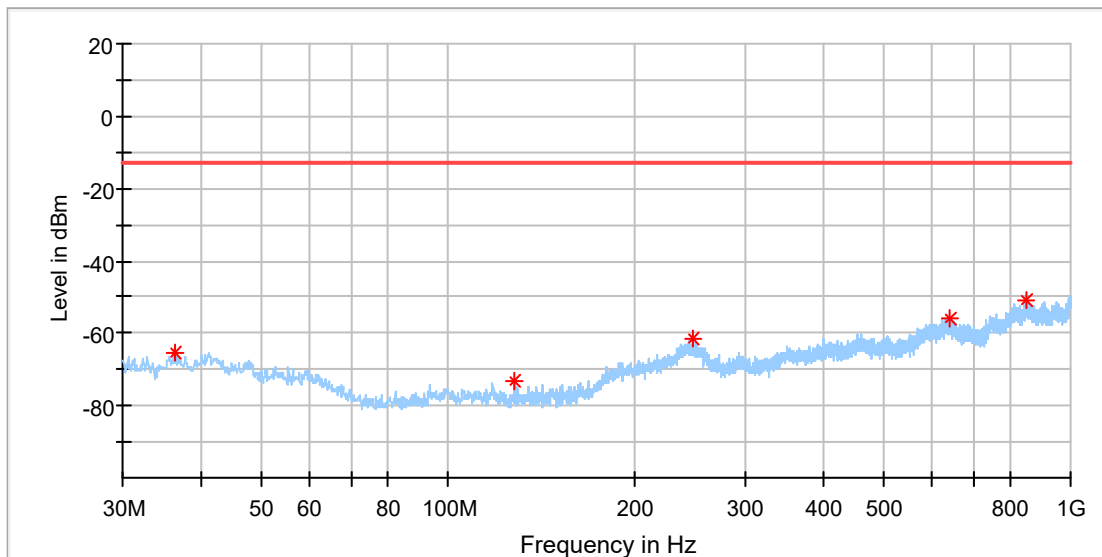
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 32.061250       | -71.31        | -13.00      | 58.31       | 100.0       | V   | 78.0          | -128.5     |
| 94.990000       | -50.44        | -13.00      | 37.44       | 100.0       | V   | 58.0          | -99.8      |
| 300.872500      | -63.34        | -13.00      | 50.34       | 100.0       | V   | 256.0         | -111.0     |
| 918.641250      | -50.38        | -13.00      | 37.38       | 100.0       | V   | 207.0         | -100.3     |

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## EUT Information

|                     |                                  |
|---------------------|----------------------------------|
| EUT Name:           | WisGate Edge Prime               |
| Model:              | RAK7240CV2                       |
| Test Mode:          | LTE Band 4_1.4M_QPSK_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002         |
| Test Voltage::      | AC 120V/60Hz                     |
| Remark:             | Temp 24 Humi:50%                 |
| Test Standard:      | FCC Part 27                      |
| Tested By:          | Kei Zhang                        |
| Reviewed By:        | Terry Yin                        |



## Critical\_Freqs

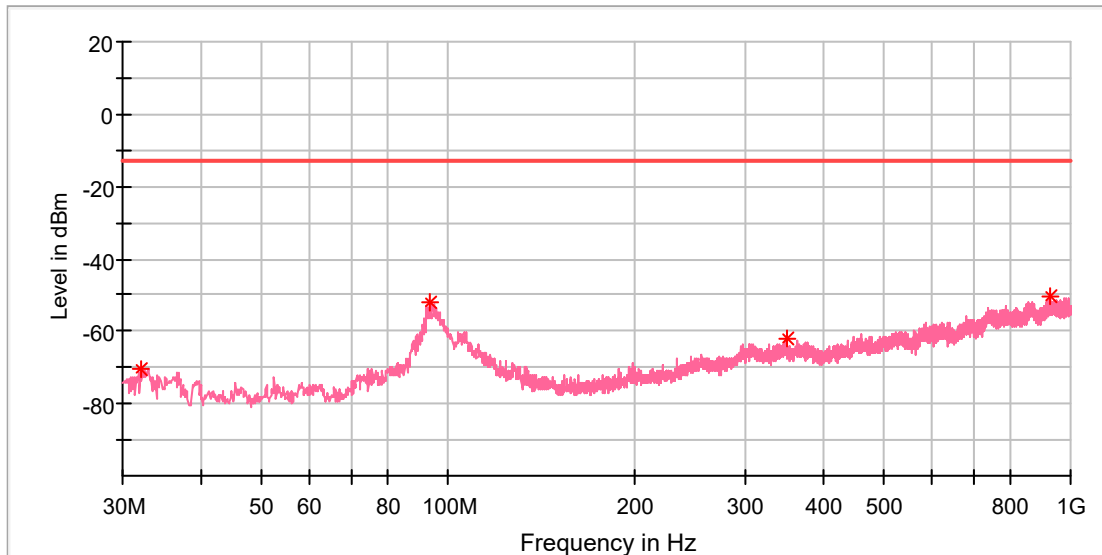
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 36.426250       | -65.14        | -13.00      | 52.14       | 100.0       | H   | 77.0          | -113.4     |
| 127.727500      | -73.33        | -13.00      | 60.33       | 100.0       | H   | 47.0          | -123.3     |
| 246.795000      | -61.55        | -13.00      | 48.55       | 100.0       | H   | 179.0         | -110.0     |
| 640.008750      | -55.66        | -13.00      | 42.66       | 100.0       | H   | 339.0         | -104.5     |
| 850.135000      | -51.12        | -13.00      | 38.12       | 100.0       | H   | 36.0          | -99.8      |

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## EUT Information

|                     |                                  |
|---------------------|----------------------------------|
| EUT Name:           | WisGate Edge Prime               |
| Model:              | RAK7240CV2                       |
| Test Mode:          | LTE Band 4_1.4M_QPSK_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002         |
| Test Voltage::      | AC 120V/60Hz                     |
| Remark:             | Temp 24 Humi:50%                 |
| Test Standard:      | FCC Part 27                      |
| Tested By:          | Kei Zhang                        |
| Reviewed By:        | Terry Yin                        |



## Critical\_Freqs

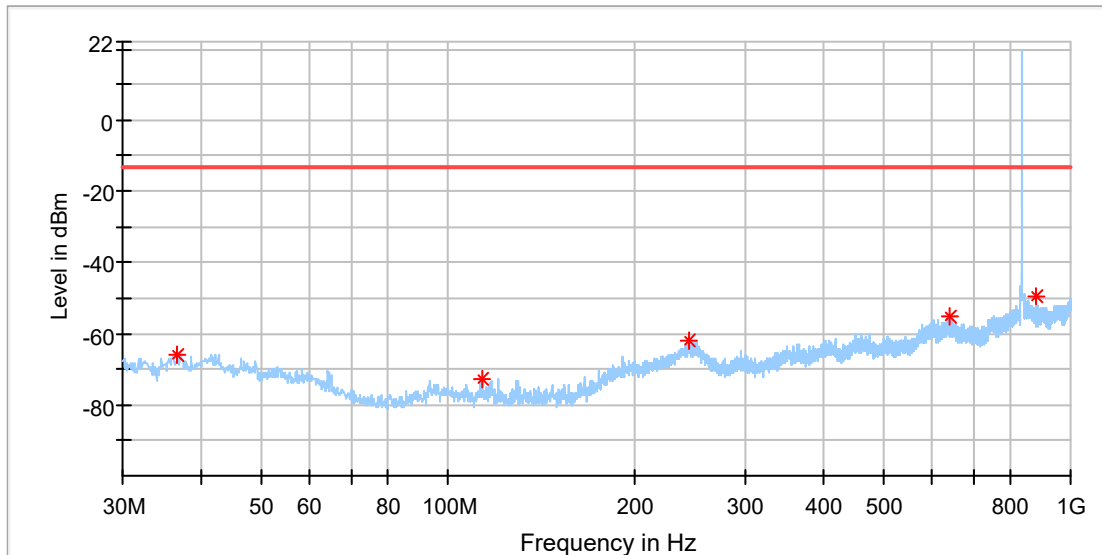
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 32.061250       | -70.45        | -13.00      | 57.45       | 100.0       | V   | 68.0          | -128.5     |
| 93.413750       | -52.15        | -13.00      | 39.15       | 100.0       | V   | 151.0         | -101.2     |
| 350.342500      | -62.32        | -13.00      | 49.32       | 100.0       | V   | 79.0          | -110.7     |
| 930.887500      | -50.40        | -13.00      | 37.40       | 100.0       | V   | 268.0         | -100.0     |

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## EUT Information

|                     |                                  |
|---------------------|----------------------------------|
| EUT Name:           | WisGate Edge Prime               |
| Model:              | RAK7240CV2                       |
| Test Mode:          | LTE Band 5_1.4M_QPSK_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002         |
| Test Voltage::      | AC 120V/60Hz                     |
| Remark:             | Temp 24 Humi:50%                 |
| Test Standard:      | FCC Part 22                      |
| Tested By:          | Kei Zhang                        |
| Reviewed By:        | Terry Yin                        |



## Critical\_Freqs

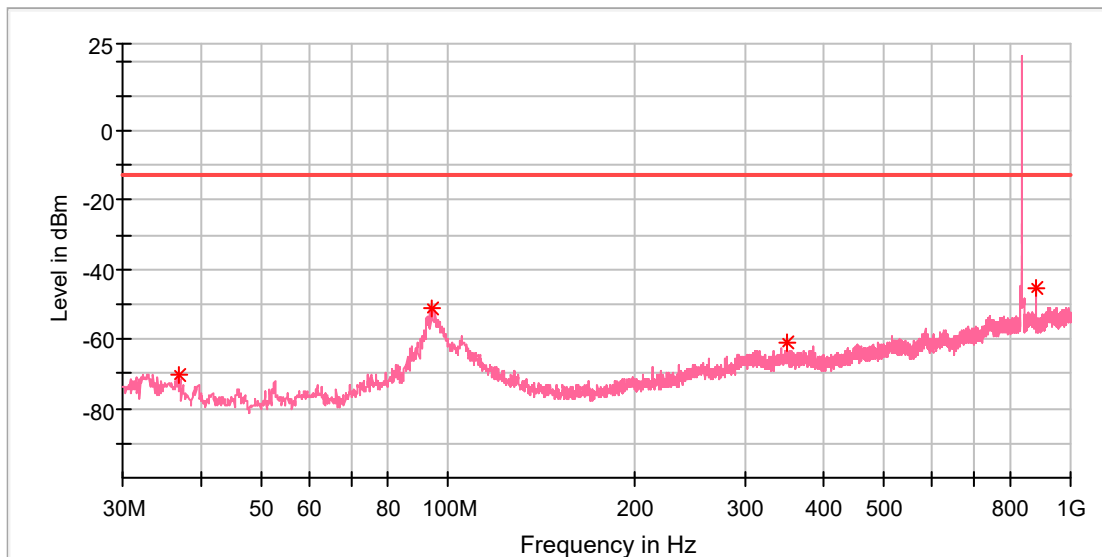
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 36.668750       | -65.78        | -13.00      | 52.78       | 100.0       | H   | 65.0          | -113.3     |
| 113.541250      | -72.72        | -13.00      | 59.72       | 100.0       | H   | 59.0          | -122.6     |
| 243.521250      | -61.92        | -13.00      | 48.92       | 100.0       | H   | 65.0          | -110.0     |
| 639.523750      | -55.32        | -13.00      | 42.32       | 100.0       | H   | 199.0         | -104.5     |
| 882.023750      | -49.34        | -13.00      | 36.34       | 100.0       | H   | 338.0         | -102.1     |

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## EUT Information

|                     |                                  |
|---------------------|----------------------------------|
| EUT Name:           | WisGate Edge Prime               |
| Model:              | RAK7240CV2                       |
| Test Mode:          | LTE Band 5_1.4M_QPSK_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002         |
| Test Voltage::      | AC 120V/60Hz                     |
| Remark:             | Temp 24 Humi:50%                 |
| Test Standard:      | FCC Part 22                      |
| Tested By:          | Kei Zhang                        |
| Reviewed By:        | Terry Yin                        |



## Critical\_Freqs

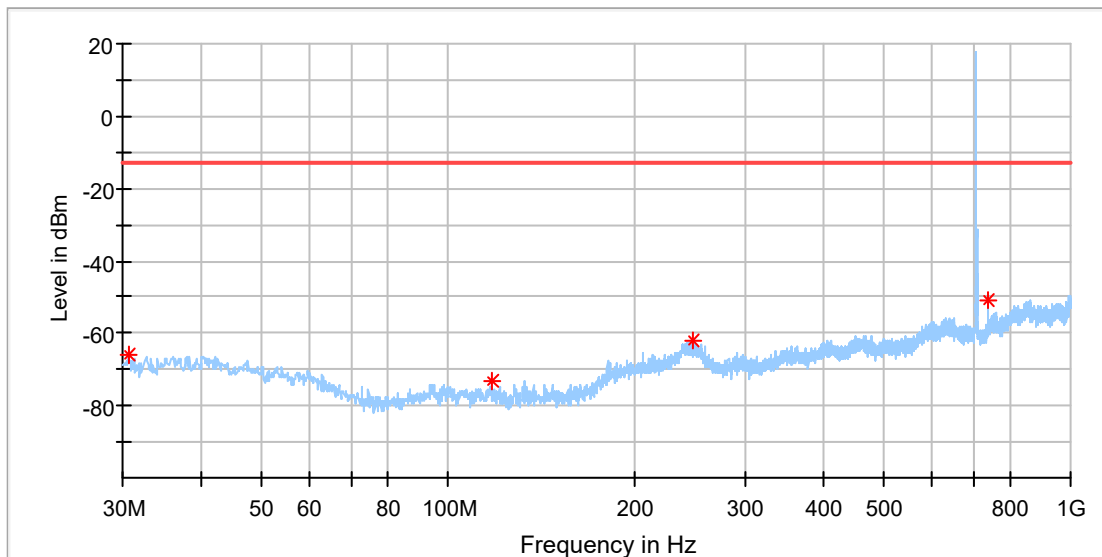
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 36.911250       | -70.41        | -13.00      | 57.41       | 100.0       | V   | 0.0           | -125.6     |
| 94.141250       | -51.07        | -13.00      | 38.07       | 100.0       | V   | 65.0          | -99.8      |
| 351.797500      | -60.83        | -13.00      | 47.83       | 100.0       | V   | 30.0          | -111.0     |
| 881.296250      | -45.24        | -13.00      | 32.24       | 100.0       | V   | 248.0         | -102.3     |

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## EUT Information

|                     |                                   |
|---------------------|-----------------------------------|
| EUT Name:           | WisGate Edge Prime                |
| Model:              | RAK7240CV2                        |
| Test Mode:          | LTE Band 12_1.4M_QPSK_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002          |
| Test Voltage::      | AC 120V/60Hz                      |
| Remark:             | Temp 24 Humi:50%                  |
| Test Standard:      | FCC Part 27                       |
| Tested By:          | Kei Zhang                         |
| Reviewed By:        | Terry Yin                         |



## Critical Freqs

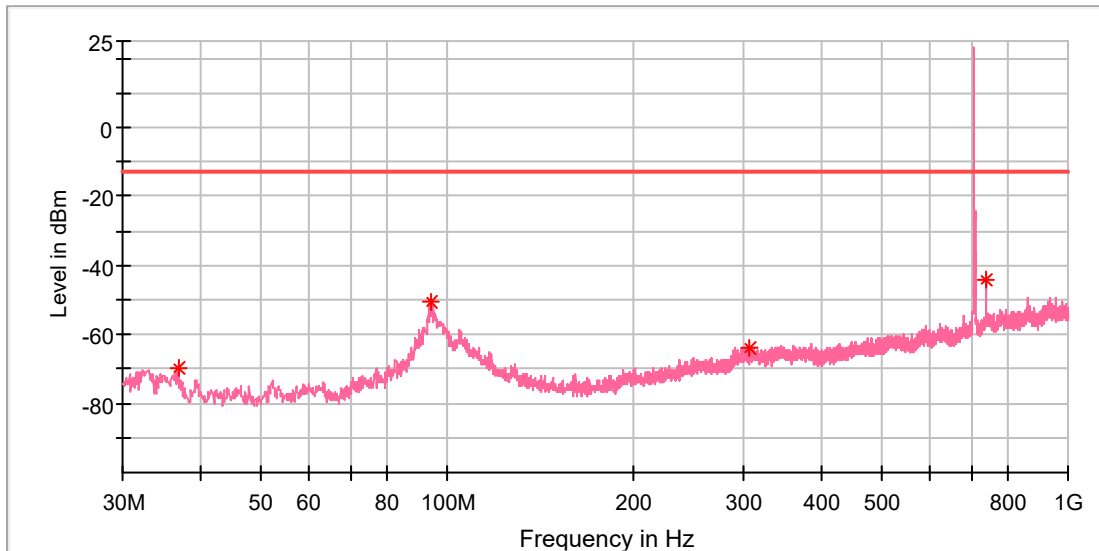
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 30.606250       | -65.96        | -13.00      | 52.96       | 100.0       | H   | 90.0          | -116.9     |
| 117.542500      | -73.17        | -13.00      | 60.17       | 100.0       | H   | 241.0         | -121.8     |
| 247.037500      | -62.12        | -13.00      | 49.13       | 100.0       | H   | 90.0          | -109.9     |
| 737.857500      | -51.03        | -13.00      | 38.03       | 100.0       | H   | 49.0          | -105.0     |

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## EUT Information

|                     |                                   |
|---------------------|-----------------------------------|
| EUT Name:           | WisGate Edge Prime                |
| Model:              | RAK7240CV2                        |
| Test Mode:          | LTE Band 12_1.4M_QPSK_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002          |
| Test Voltage::      | AC 120V/60Hz                      |
| Remark:             | Temp 24 Humi:50%                  |
| Test Standard:      | FCC Part 27                       |
| Tested By:          | Kei Zhang                         |
| Reviewed By:        | Terry Yin                         |



## Critical\_Freqs

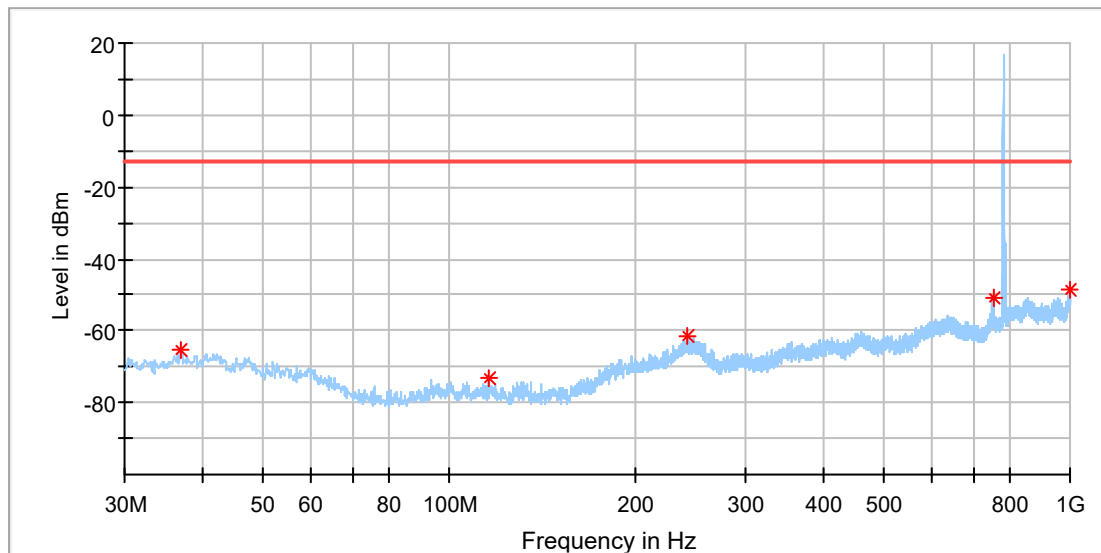
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 36.911250       | -69.70        | -13.00      | 56.70       | 100.0       | V   | 31.0          | -125.6     |
| 94.262500       | -50.79        | -13.00      | 37.79       | 100.0       | V   | 56.0          | -99.7      |
| 306.692500      | -63.70        | -13.00      | 50.70       | 100.0       | V   | 107.0         | -111.1     |
| 737.978750      | -43.92        | -13.00      | 30.92       | 100.0       | V   | 122.0         | -101.8     |

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## EUT Information

|                     |                                 |
|---------------------|---------------------------------|
| EUT Name:           | WisGate Edge Prime              |
| Model:              | RAK7240CV2                      |
| Test Mode:          | LTE Band 13_5M_QPSK_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002        |
| Test Voltage::      | AC 120V/60Hz                    |
| Remark:             | Temp 24 Humi:50%                |
| Test Standard:      | FCC Part 27                     |
| Tested By:          | Kei Zhang                       |
| Reviewed By:        | Terry Yin                       |



## Critical\_Freqs

| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 37.032500       | -65.60        | -13.00      | 52.60       | 100.0       | H   | 0.0           | -113.5     |
| 115.966250      | -73.14        | -13.00      | 60.14       | 100.0       | H   | 54.0          | -122.2     |
| 241.945000      | -61.46        | -13.00      | 48.46       | 100.0       | H   | 213.0         | -110.1     |
| 751.558750      | -50.74        | -13.00      | 37.74       | 100.0       | H   | 59.0          | -103.4     |
| 999.757500      | -48.53        | -13.00      | 35.53       | 100.0       | H   | 218.0         | -97.7      |

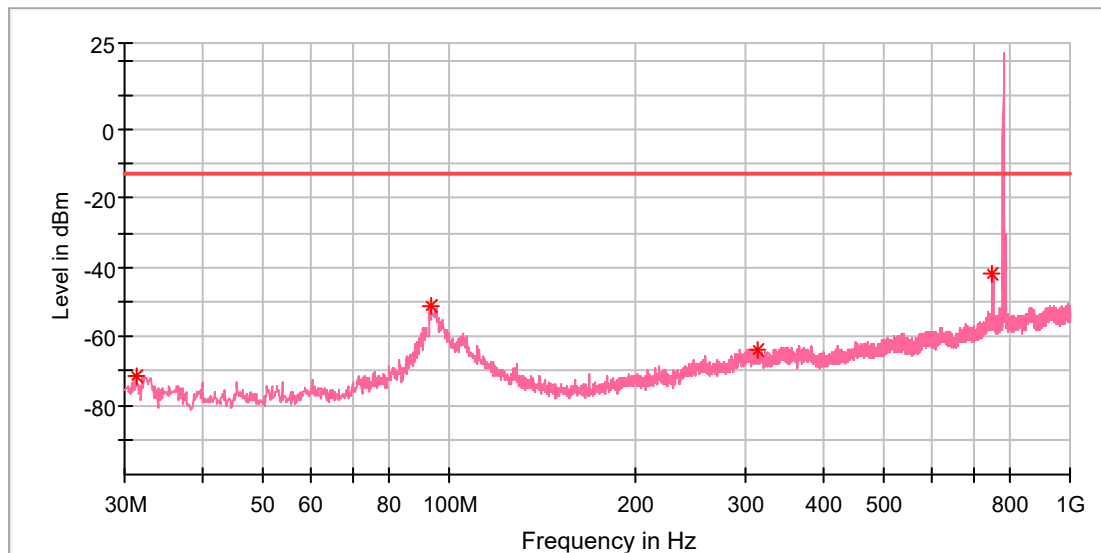


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## EUT Information

|                     |                                 |
|---------------------|---------------------------------|
| EUT Name:           | WisGate Edge Prime              |
| Model:              | RAK7240CV2                      |
| Test Mode:          | LTE Band 13_5M_QPSK_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002        |
| Test Voltage::      | AC 120V/60Hz                    |
| Remark:             | Temp 24 Humi:50%                |
| Test Standard:      | FCC Part 27                     |
| Tested By:          | Kei Zhang                       |
| Reviewed By:        | Terry Yin                       |



## Critical\_Freqs

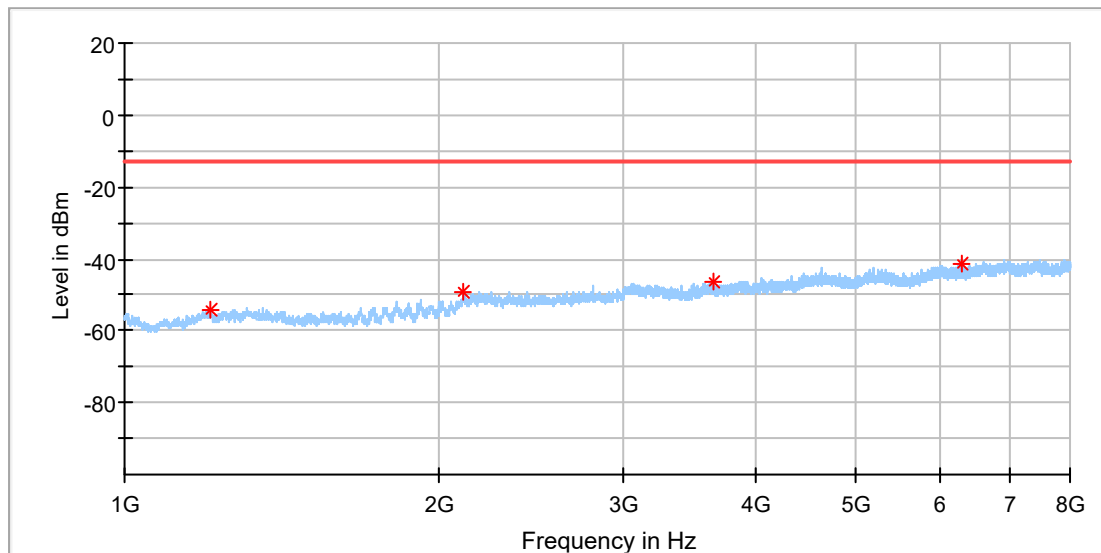
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 31.333750       | -71.41        | -13.00      | 58.41       | 100.0       | V   | 79.0          | -128.3     |
| 93.535000       | -50.90        | -13.00      | 37.90       | 100.0       | V   | 94.0          | -101.0     |
| 313.118750      | -63.79        | -13.00      | 50.79       | 100.0       | V   | 105.0         | -111.2     |
| 749.133750      | -41.61        | -13.00      | 28.61       | 100.0       | V   | 158.0         | -102.1     |

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Test report no.

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## EUT Information

|                     |                                  |
|---------------------|----------------------------------|
| EUT Name:           | WisGate Edge Prime               |
| Model:              | RAK7240CV2                       |
| Test Mode:          | LTE Band 2_1.4M_QPSK_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002         |
| Test Voltage::      | AC 120V/60Hz                     |
| Remark:             | Temp 24 Humi:50%                 |
| Test Standard:      | FCC Part 24                      |
| Tested By:          | Kei Zhang                        |
| Reviewed By:        | Terry Yin                        |



## Critical\_Freqs

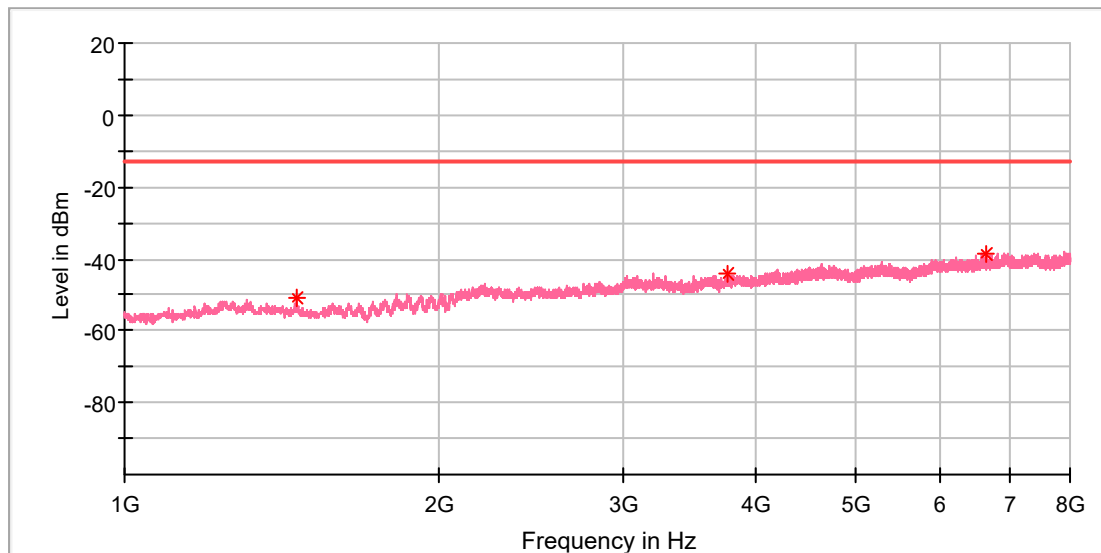
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 1211.000000     | -54.30        | -13.00      | 41.30       | 150.0       | H   | 345.0         | -93.5      |
| 2107.000000     | -49.27        | -13.00      | 36.27       | 150.0       | H   | 58.0          | -88.3      |
| 3647.500000     | -46.18        | -13.00      | 33.18       | 150.0       | H   | 50.0          | -85.7      |
| 6302.000000     | -41.44        | -13.00      | 28.44       | 150.0       | H   | 334.0         | -80.2      |

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Test report no.

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## EUT Information

|                     |                                  |
|---------------------|----------------------------------|
| EUT Name:           | WisGate Edge Prime               |
| Model:              | RAK7240CV2                       |
| Test Mode:          | LTE Band 2_1.4M_QPSK_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002         |
| Test Voltage::      | AC 120V/60Hz                     |
| Remark:             | Temp 24 Humi:50%                 |
| Test Standard:      | FCC Part 24                      |
| Tested By:          | Kei Zhang                        |
| Reviewed By:        | Terry Yin                        |



## Critical\_Freqs

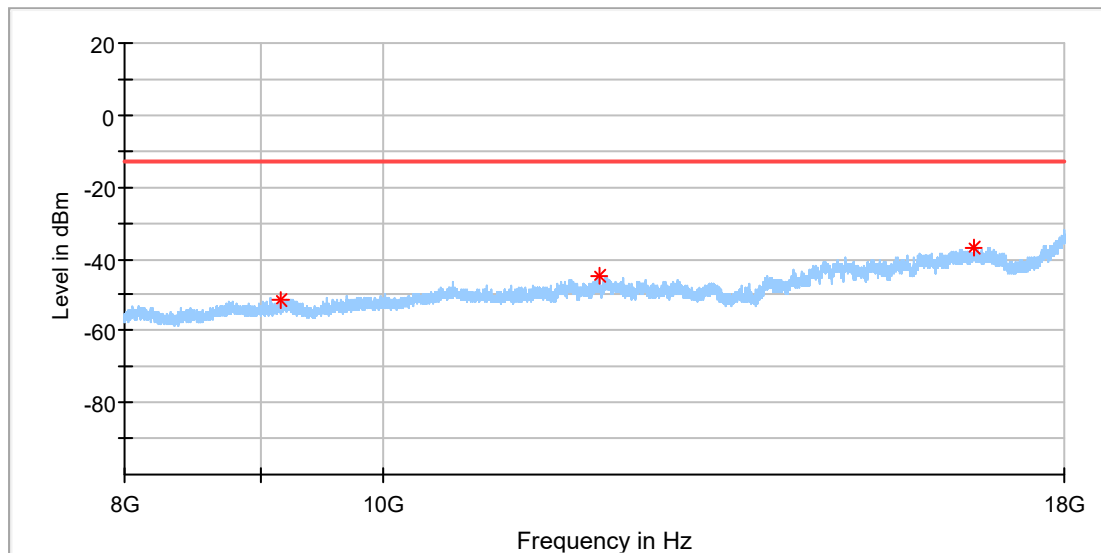
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 1461.000000     | -50.88        | -13.00      | 37.88       | 150.0       | V   | 109.0         | -91.4      |
| 3759.000000     | -44.01        | -13.00      | 31.01       | 150.0       | V   | 288.0         | -83.1      |
| 6636.000000     | -38.86        | -13.00      | 25.86       | 150.0       | V   | 282.0         | -77.9      |

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Test report no.

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## EUT Information

EUT Name: WisGate Edge Prime  
Model: RAK7240CV2  
Test Mode: LTE Band 2\_1.4M\_QPSK\_Mid channel  
Order No/Sample No: 168520158/A003893351-002  
Test Voltage:: AC 120V/60Hz  
Remark: Temp 24 Humi:50%  
Test Standard: FCC Part 24  
Tested By: Kei Zhang  
Reviewed By: Terry Yin



## Critical\_Freqs

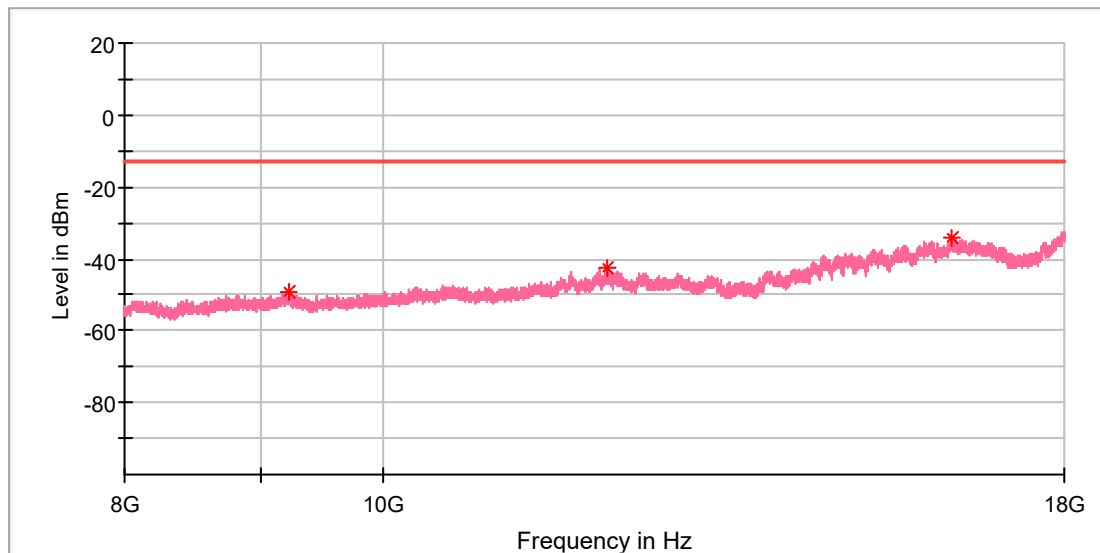
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 9162.500000     | -51.16        | -13.00      | 38.16       | 150.0       | H   | 14.0          | -86.3      |
| 12042.500000    | -44.59        | -13.00      | 31.59       | 150.0       | H   | 0.0           | -79.6      |
| 16641.000000    | -36.98        | -13.00      | 23.98       | 150.0       | H   | 86.0          | -73.4      |

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Test report no.

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## EUT Information

|                     |                                  |
|---------------------|----------------------------------|
| EUT Name:           | WisGate Edge Prime               |
| Model:              | RAK7240CV2                       |
| Test Mode:          | LTE Band 2_1.4M_QPSK_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002         |
| Test Voltage::      | AC 120V/60Hz                     |
| Remark:             | Temp 24 Humi:50%                 |
| Test Standard:      | FCC Part 24                      |
| Tested By:          | Kei Zhang                        |
| Reviewed By:        | Terry Yin                        |



## Critical\_Freqs

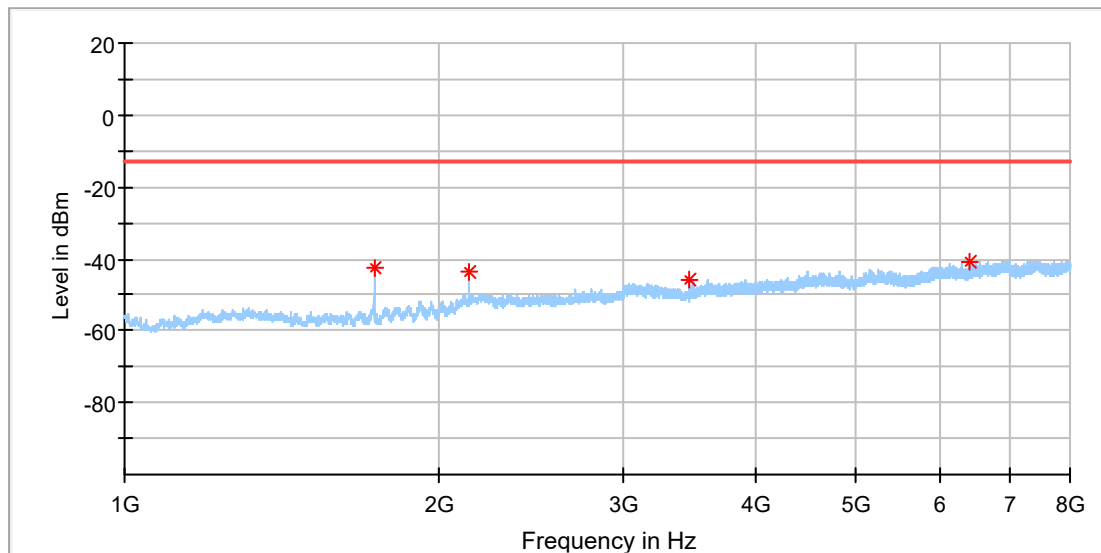
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 9219.500000     | -49.23        | -13.00      | 36.23       | 150.0       | V   | 346.0         | -83.8      |
| 12136.500000    | -42.60        | -13.00      | 29.60       | 150.0       | V   | 2.0           | -77.9      |
| 16342.000000    | -34.40        | -13.00      | 21.40       | 150.0       | V   | 194.0         | -70.5      |

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## EUT Information

|                     |                                  |
|---------------------|----------------------------------|
| EUT Name:           | WisGate Edge Prime               |
| Model:              | RAK7240CV2                       |
| Test Mode:          | LTE Band 4_1.4M_QPSK_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002         |
| Test Voltage::      | AC 120V/60Hz                     |
| Remark:             | Temp 24 Humi:50%                 |
| Test Standard:      | FCC Part 27                      |
| Tested By:          | Kei Zhang                        |
| Reviewed By:        | Terry Yin                        |



## Critical\_Freqs

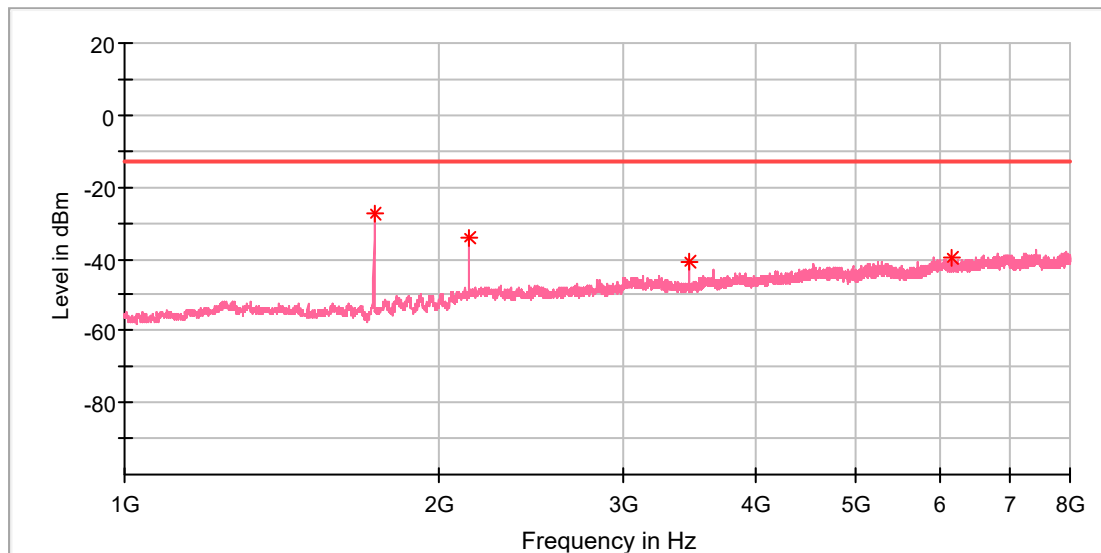
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 1732.000000     | -42.64        | -13.00      | 29.64       | 150.0       | H   | 196.0         | -91.8      |
| 2132.500000     | -43.48        | -13.00      | 30.48       | 150.0       | H   | 332.0         | -88.8      |
| 3463.500000     | -46.07        | -13.00      | 33.07       | 150.0       | H   | 168.0         | -86.7      |
| 6412.500000     | -41.06        | -13.00      | 28.06       | 150.0       | H   | 309.0         | -80.4      |

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Test report no.

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## EUT Information

|                     |                                  |
|---------------------|----------------------------------|
| EUT Name:           | WisGate Edge Prime               |
| Model:              | RAK7240CV2                       |
| Test Mode:          | LTE Band 4_1.4M_QPSK_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002         |
| Test Voltage::      | AC 120V/60Hz                     |
| Remark:             | Temp 24 Humi:50%                 |
| Test Standard:      | FCC Part 27                      |
| Tested By:          | Kei Zhang                        |
| Reviewed By:        | Terry Yin                        |



## Critical\_Freqs

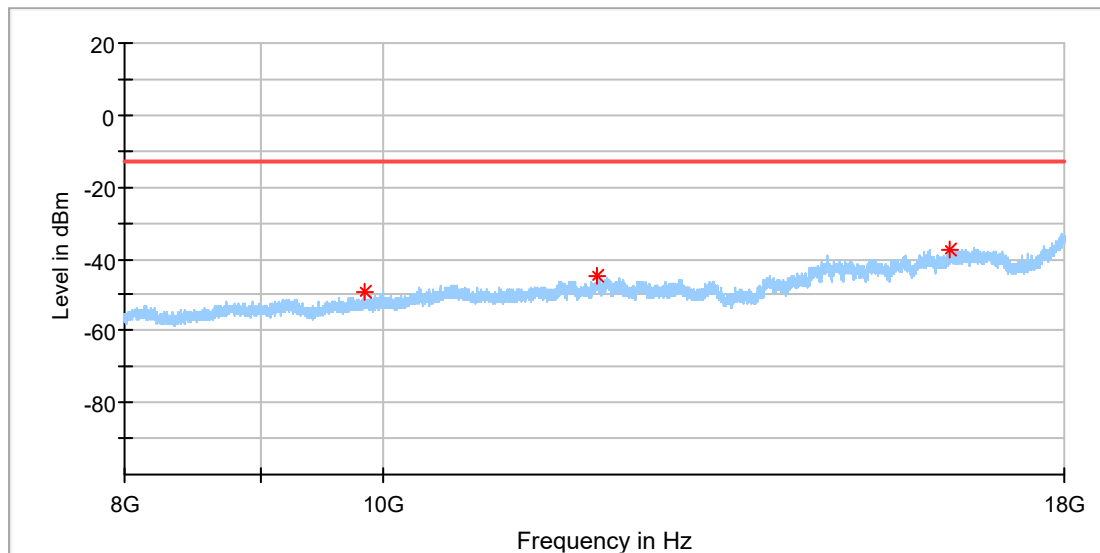
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 1732.000000     | -27.66        | -13.00      | 14.66       | 150.0       | V   | 236.0         | -89.9      |
| 2132.500000     | -34.34        | -13.00      | 21.34       | 150.0       | V   | 356.0         | -86.6      |
| 3464.000000     | -40.77        | -13.00      | 27.77       | 150.0       | V   | 250.0         | -84.5      |
| 6173.500000     | -39.74        | -13.00      | 26.74       | 150.0       | V   | 0.0           | -78.8      |

**Prüfbericht - Nr.:** CN25A5EX 002  
*Test report no.*

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## EUT Information

|                     |                                  |
|---------------------|----------------------------------|
| EUT Name:           | WisGate Edge Prime               |
| Model:              | RAK7240CV2                       |
| Test Mode:          | LTE Band 4_1.4M_QPSK_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002         |
| Test Voltage::      | AC 120V/60Hz                     |
| Remark:             | Temp 24 Humi:50%                 |
| Test Standard:      | FCC Part 27                      |
| Tested By:          | Kei Zhang                        |
| Reviewed By:        | Terry Yin                        |



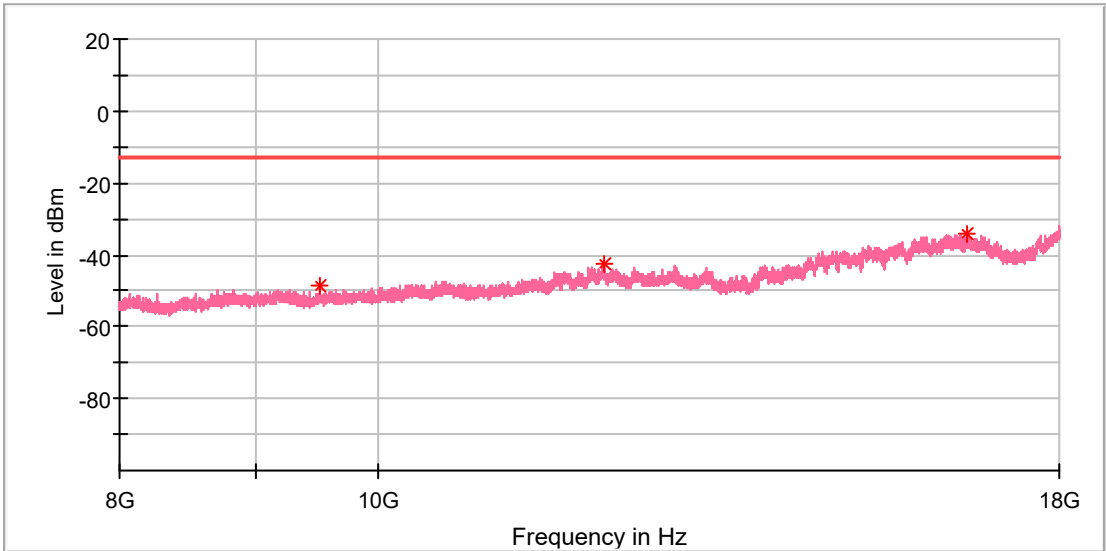
## Critical\_Freqs

| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 9847.000000     | -49.10        | -13.00      | 36.10       | 150.0       | H   | 0.0           | -84.5      |
| 12040.500000    | -44.87        | -13.00      | 31.87       | 150.0       | H   | 97.0          | -79.6      |
| 16309.500000    | -37.36        | -13.00      | 24.36       | 150.0       | H   | 120.0         | -73.6      |



**EUT Information**

EUT Name: WisGate Edge Prime  
 Model: RAK7240CV2  
 Test Mode: LTE Band 4\_1.4M\_QPSK\_Mid channel  
 Order No/Sample No: 168520158/A003893351-002  
 Test Voltage:: AC 120V/60Hz  
 Remark: Temp 24 Humi:50%  
 Test Standard: FCC Part 27  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



**Critical\_Freqs**

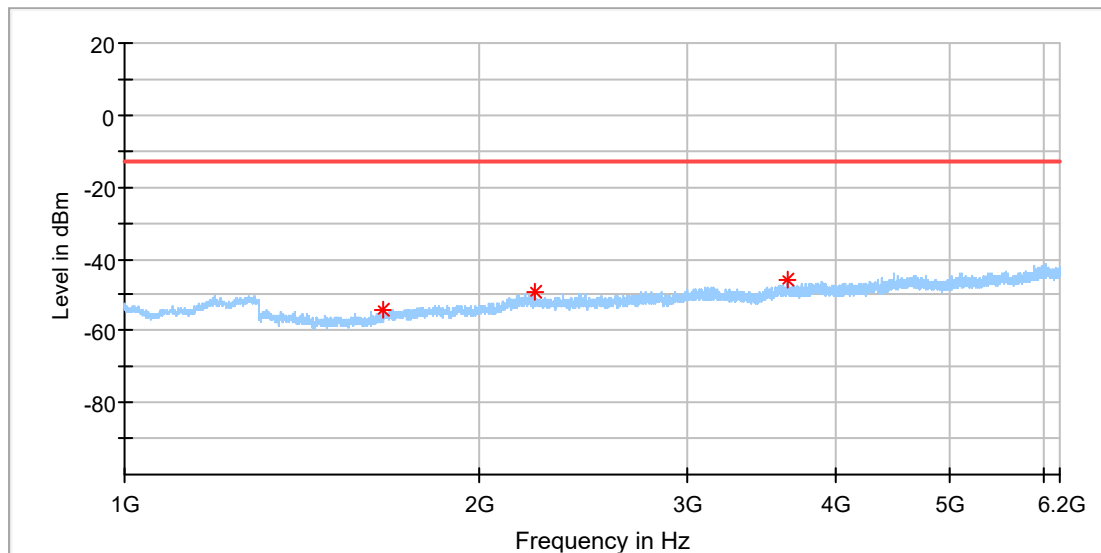
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 9507.500000     | -48.65        | -13.00      | 35.65       | 150.0       | V   | 4.0           | -84.5      |
| 12148.500000    | -42.36        | -13.00      | 29.36       | 150.0       | V   | 150.0         | -77.7      |
| 16634.500000    | -34.10        | -13.00      | 21.10       | 150.0       | V   | 266.0         | -71.1      |

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## EUT Information

|                     |                                  |
|---------------------|----------------------------------|
| EUT Name:           | WisGate Edge Prime               |
| Model:              | RAK7240CV2                       |
| Test Mode:          | LTE Band 5_1.4M_QPSK_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002         |
| Test Voltage::      | AC 120V/60Hz                     |
| Remark:             | Temp 24 Humi:50%                 |
| Test Standard:      | FCC Part 22                      |
| Tested By:          | Kei Zhang                        |
| Reviewed By:        | Terry Yin                        |



## Critical\_Freqs

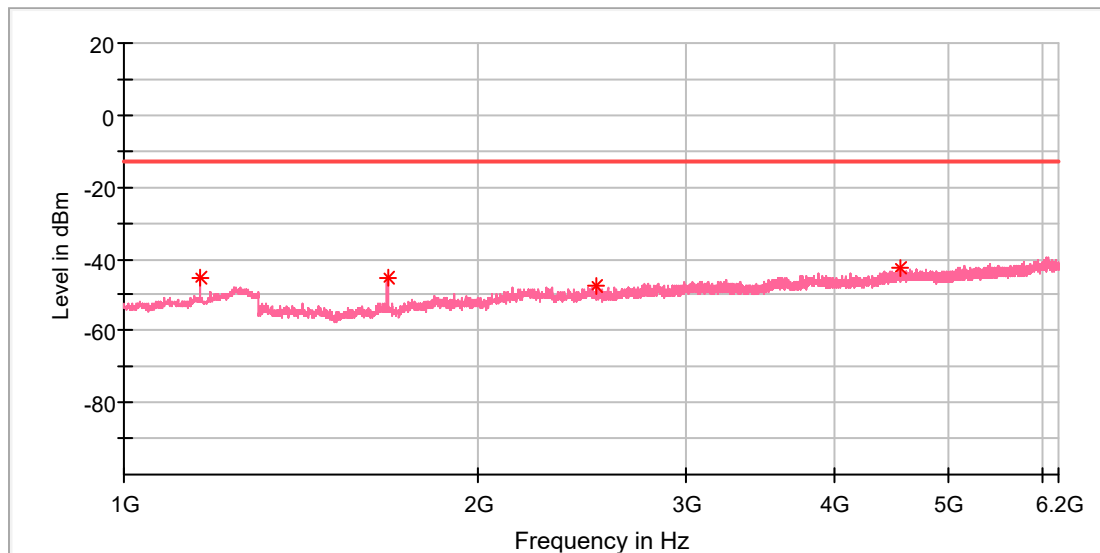
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 1658.000000     | -54.00        | -13.00      | 41.00       | 150.0       | H   | 354.0         | -92.5      |
| 2225.000000     | -48.97        | -13.00      | 35.97       | 150.0       | H   | 271.0         | -88.0      |
| 3646.000000     | -45.66        | -13.00      | 32.66       | 150.0       | H   | 165.0         | -86.1      |

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Test report no.

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## EUT Information

EUT Name: WisGate Edge Prime  
Model: RAK7240CV2  
Test Mode: LTE Band 5\_1.4M\_QPSK\_Mid channel  
Order No/Sample No: 168520158/A003893351-002  
Test Voltage:: AC 120V/60Hz  
Remark: Temp 24 Humi:50%  
Test Standard: FCC Part 22  
Tested By: Kei Zhang  
Reviewed By: Terry Yin



## Critical\_Freqs

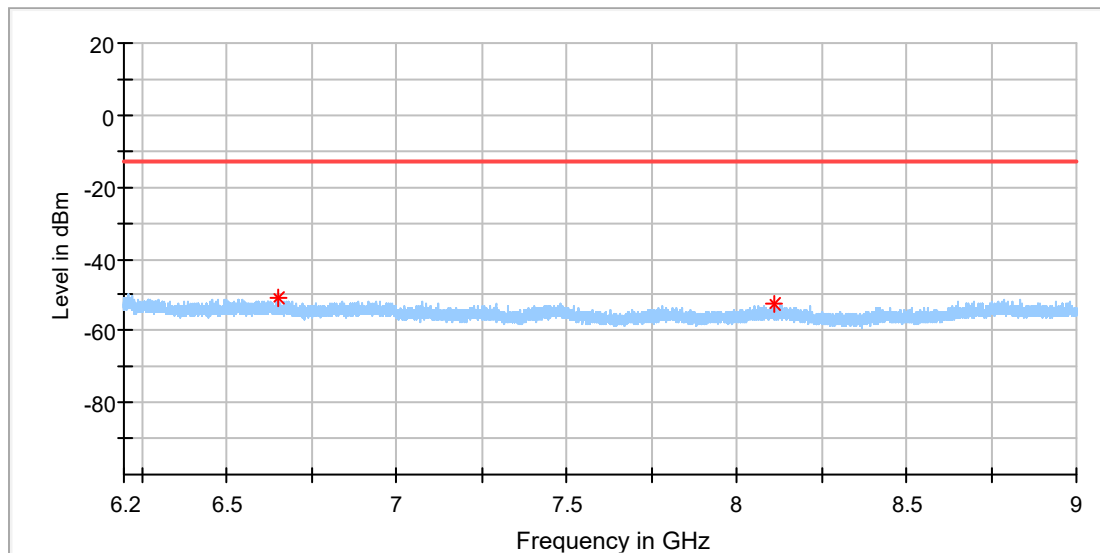
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 1160.500000     | -45.04        | -13.00      | 32.04       | 150.0       | V   | 349.0         | -93.1      |
| 1672.000000     | -45.42        | -13.00      | 32.42       | 150.0       | V   | 175.0         | -90.5      |
| 2515.000000     | -47.55        | -13.00      | 34.55       | 150.0       | V   | 286.0         | -86.5      |
| 4547.500000     | -42.77        | -13.00      | 29.77       | 150.0       | V   | 139.0         | -81.7      |

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Test report no.

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## EUT Information

|                     |                                  |
|---------------------|----------------------------------|
| EUT Name:           | WisGate Edge Prime               |
| Model:              | RAK7240CV2                       |
| Test Mode:          | LTE Band 5_1.4M_QPSK_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002         |
| Test Voltage::      | AC 120V/60Hz                     |
| Remark:             | Temp 24 Humi:50%                 |
| Test Standard:      | FCC Part 22                      |
| Tested By:          | Kei Zhang                        |
| Reviewed By:        | Terry Yin                        |



## Critical\_Freqs

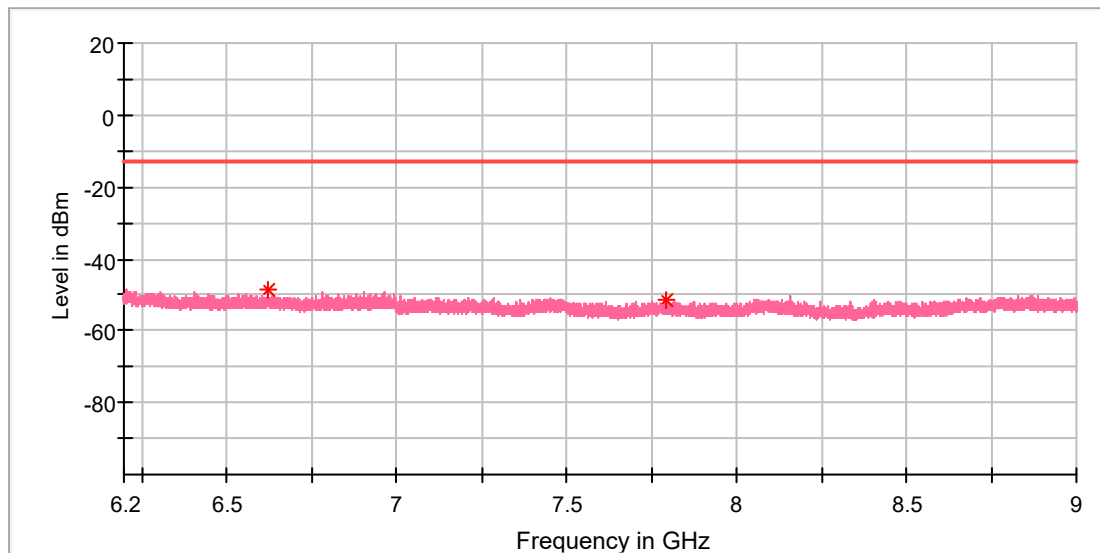
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 6653.250000     | -51.15        | -13.00      | 38.15       | 150.0       | H   | 336.0         | -88.7      |
| 8111.816667     | -52.79        | -13.00      | 39.79       | 150.0       | H   | 8.0           | -88.4      |

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## EUT Information

|                     |                                  |
|---------------------|----------------------------------|
| EUT Name:           | WisGate Edge Prime               |
| Model:              | RAK7240CV2                       |
| Test Mode:          | LTE Band 5_1.4M_QPSK_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002         |
| Test Voltage::      | AC 120V/60Hz                     |
| Remark:             | Temp 24 Humi:50%                 |
| Test Standard:      | FCC Part 22                      |
| Tested By:          | Kei Zhang                        |
| Reviewed By:        | Terry Yin                        |



## Critical\_Freqs

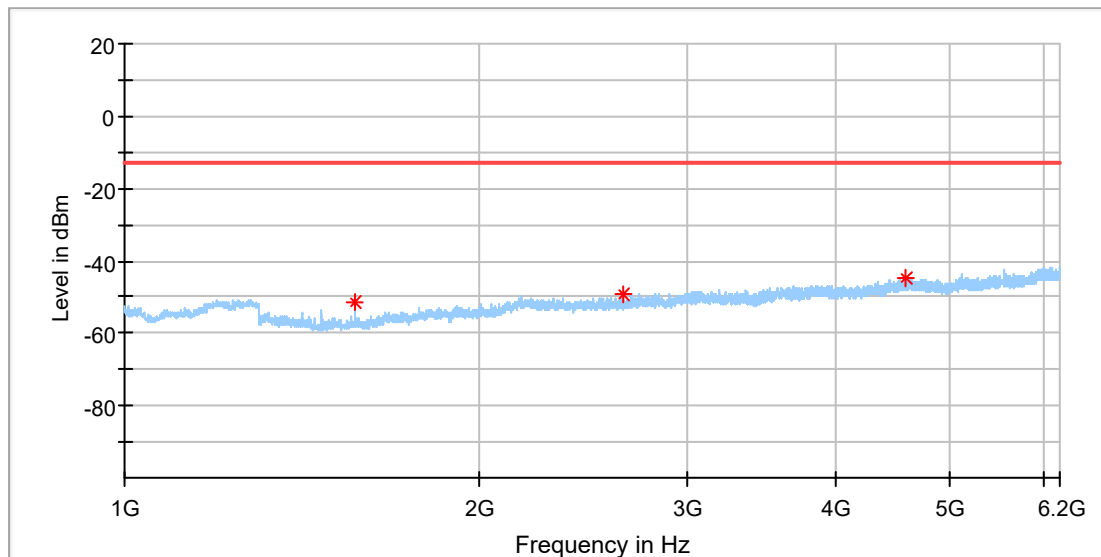
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 6625.950000     | -48.82        | -13.00      | 35.82       | 150.0       | V   | 287.0         | -87.0      |
| 7796.466667     | -51.30        | -13.00      | 38.30       | 150.0       | V   | 265.0         | -86.7      |

**Prüfbericht - Nr.:** CN25A5EX 002  
Test report no.

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## EUT Information

|                     |                                   |
|---------------------|-----------------------------------|
| EUT Name:           | WisGate Edge Prime                |
| Model:              | RAK7240CV2                        |
| Test Mode:          | LTE Band 12_1.4M_QPSK_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002          |
| Test Voltage::      | AC 120V/60Hz                      |
| Remark:             | Temp 24 Humi:50%                  |
| Test Standard:      | FCC Part 27                       |
| Tested By:          | Kei Zhang                         |
| Reviewed By:        | Terry Yin                         |



## Critical\_Freqs

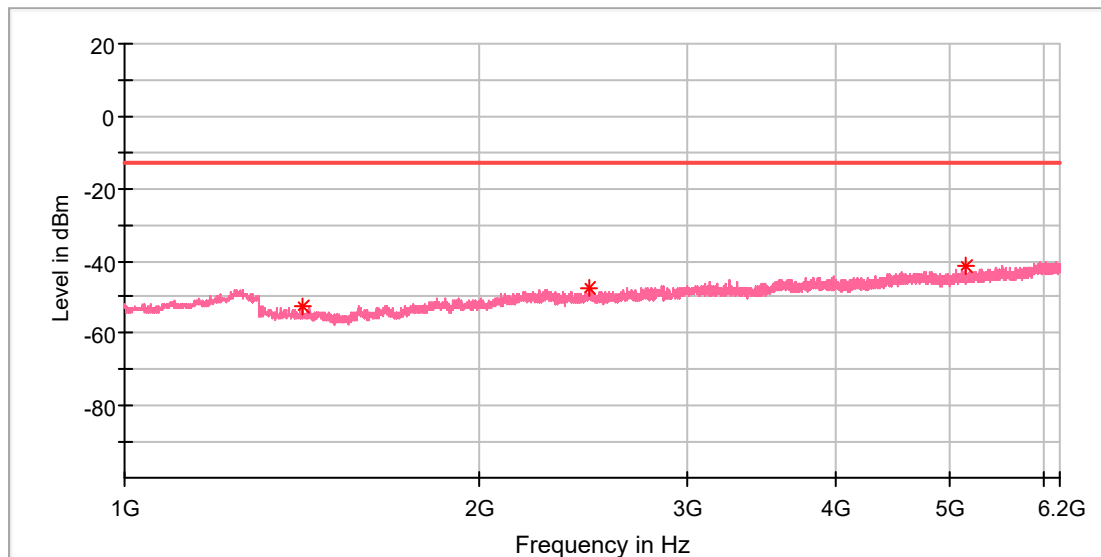
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 1567.000000     | -51.47        | -13.00      | 38.47       | 150.0       | H   | 65.0          | -93.5      |
| 2647.500000     | -49.37        | -13.00      | 36.37       | 150.0       | H   | 11.0          | -88.5      |
| 4589.000000     | -44.71        | -13.00      | 31.71       | 150.0       | H   | 113.0         | -83.5      |

**Prüfbericht - Nr.: CN25A5EX 002**  
Test report no.

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## EUT Information

|                     |                                   |
|---------------------|-----------------------------------|
| EUT Name:           | WisGate Edge Prime                |
| Model:              | RAK7240CV2                        |
| Test Mode:          | LTE Band 12_1.4M_QPSK_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002          |
| Test Voltage::      | AC 120V/60Hz                      |
| Remark:             | Temp 24 Humi:50%                  |
| Test Standard:      | FCC Part 27                       |
| Tested By:          | Kei Zhang                         |
| Reviewed By:        | Terry Yin                         |

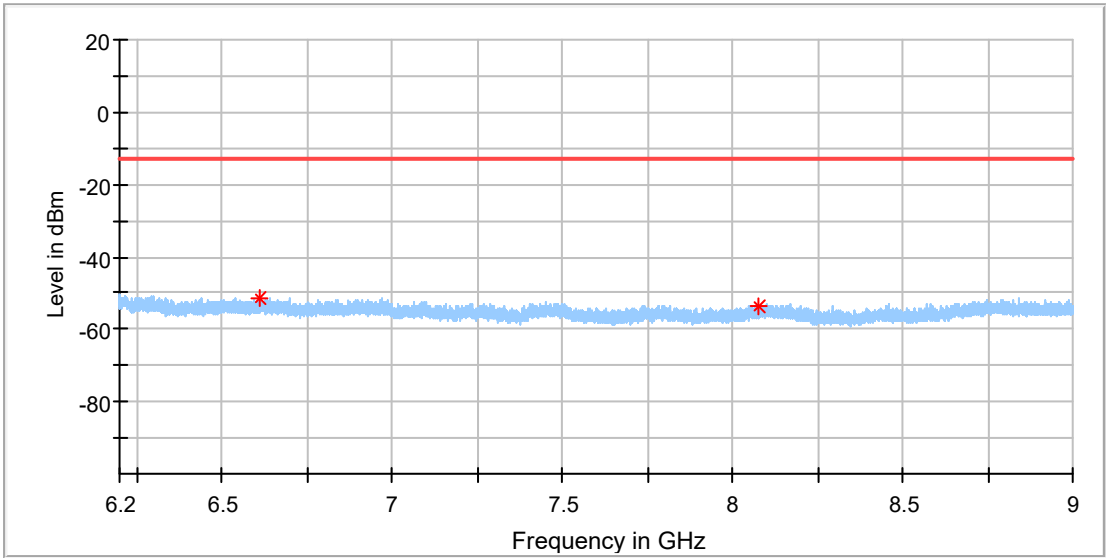


## Critical\_Freqs

| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 1413.500000     | -52.38        | -13.00      | 39.38       | 150.0       | V   | 86.0          | -91.5      |
| 2472.500000     | -47.46        | -13.00      | 34.46       | 150.0       | V   | 261.0         | -86.0      |
| 5168.000000     | -41.63        | -13.00      | 28.63       | 150.0       | V   | 5.0           | -81.2      |

**EUT Information**

EUT Name: WisGate Edge Prime  
 Model: RAK7240CV2  
 Test Mode: LTE Band 12\_1.4M\_QPSK\_Mid channel  
 Order No/Sample No: 168520158/A003893351-002  
 Test Voltage:: AC 120V/60Hz  
 Remark: Temp 24 Humi:50%  
 Test Standard: FCC Part 27  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



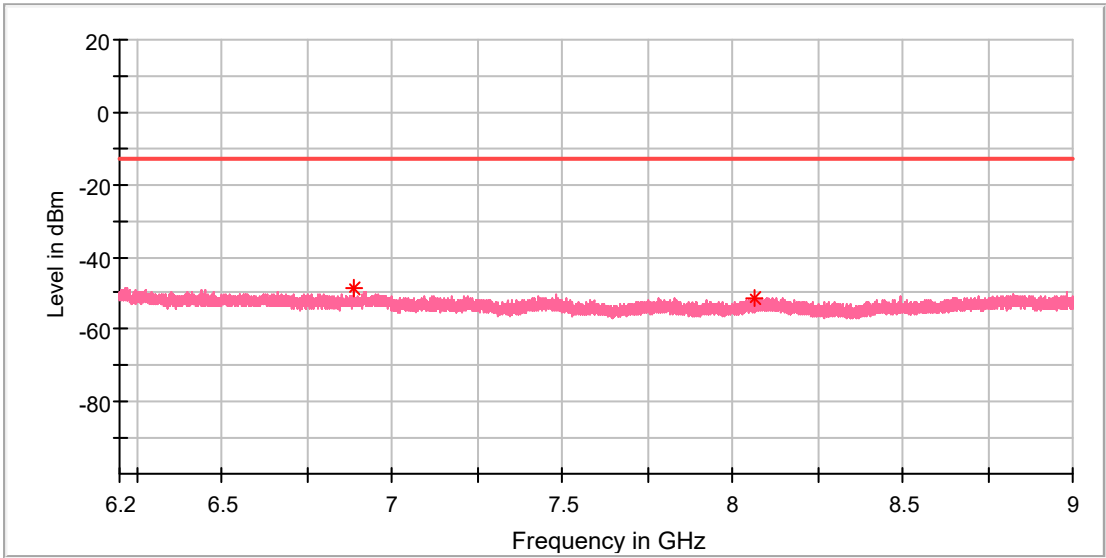
**Critical\_Freqs**

| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 6613.466667     | -51.29        | -13.00      | 38.29       | 150.0       | H   | 65.0          | -88.7      |
| 8076.700000     | -53.58        | -13.00      | 40.58       | 150.0       | H   | 133.0         | -88.5      |



**EUT Information**

EUT Name: WisGate Edge Prime  
 Model: RAK7240CV2  
 Test Mode: LTE Band 12\_1.4M\_QPSK\_Mid channel  
 Order No/Sample No: 168520158/A003893351-002  
 Test Voltage:: AC 120V/60Hz  
 Remark: Temp 24 Humi:50%  
 Test Standard: FCC Part 27  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin

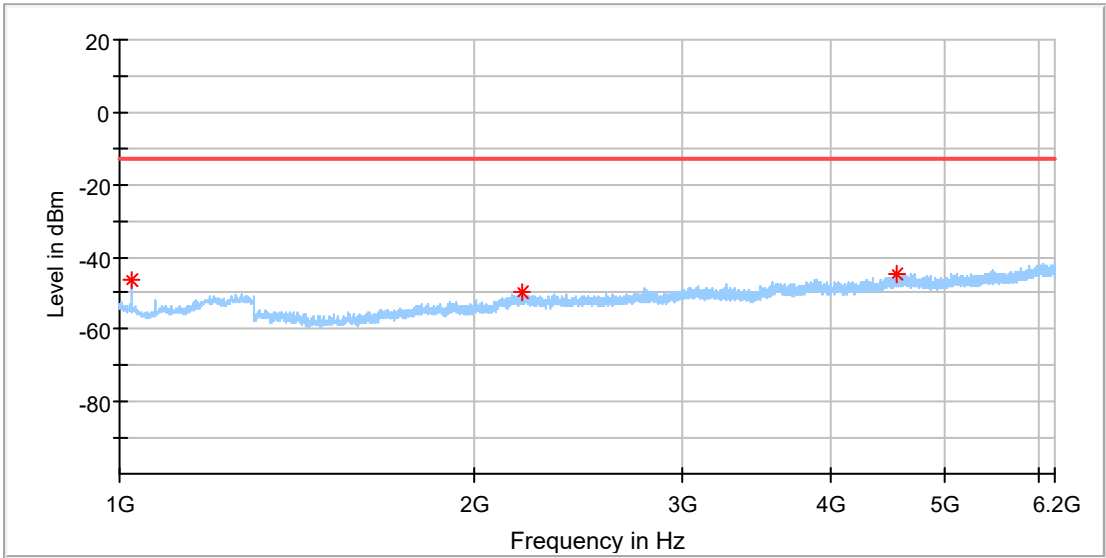


**Critical\_Freqs**

| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 6889.150000     | -48.92        | -13.00      | 35.92       | 150.0       | V   | 106.0         | -87.0      |
| 8067.600000     | -51.36        | -13.00      | 38.36       | 150.0       | V   | 127.0         | -86.5      |

**EUT Information**

EUT Name: WisGate Edge Prime  
 Model: RAK7240CV2  
 Test Mode: LTE Band 13\_5M\_QPSK\_Mid channel  
 Order No/Sample No: 168520158/A003893351-002  
 Test Voltage:: AC 120V/60Hz  
 Remark: Temp 24 Humi:50%  
 Test Standard: FCC Part 27  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



**Critical\_Freqs**

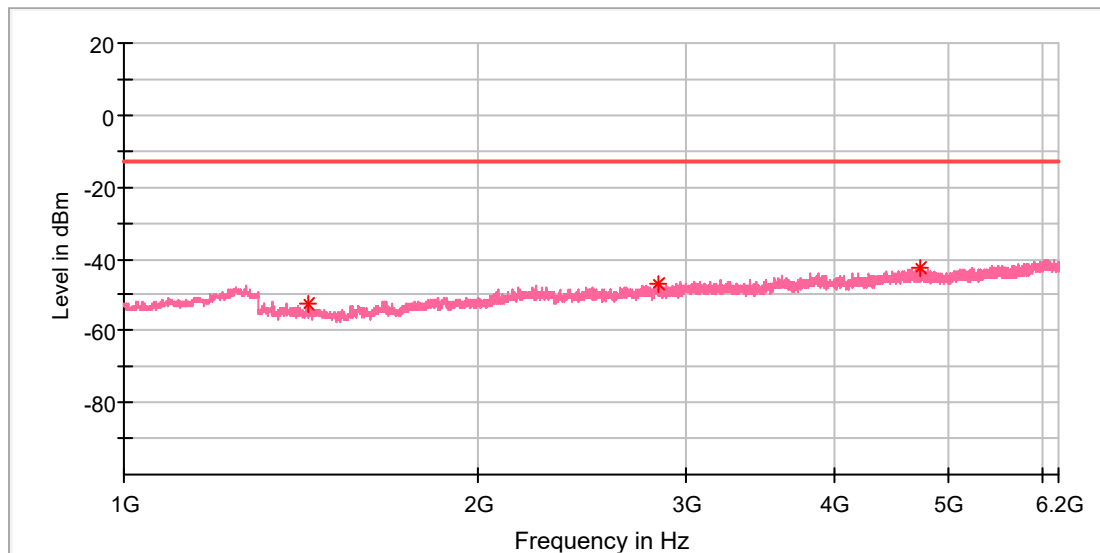
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 1024.500000     | -46.30        | -13.00      | 33.30       | 150.0       | H   | 157.0         | -95.5      |
| 2195.000000     | -49.94        | -13.00      | 36.94       | 150.0       | H   | 177.0         | -87.6      |
| 4548.500000     | -44.49        | -13.00      | 31.49       | 150.0       | H   | 347.0         | -83.7      |

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Test report no.

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## EUT Information

|                     |                                 |
|---------------------|---------------------------------|
| EUT Name:           | WisGate Edge Prime              |
| Model:              | RAK7240CV2                      |
| Test Mode:          | LTE Band 13_5M_QPSK_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002        |
| Test Voltage::      | AC 120V/60Hz                    |
| Remark:             | Temp 24 Humi:50%                |
| Test Standard:      | FCC Part 27                     |
| Tested By:          | Kei Zhang                       |
| Reviewed By:        | Terry Yin                       |



## Critical\_Freqs

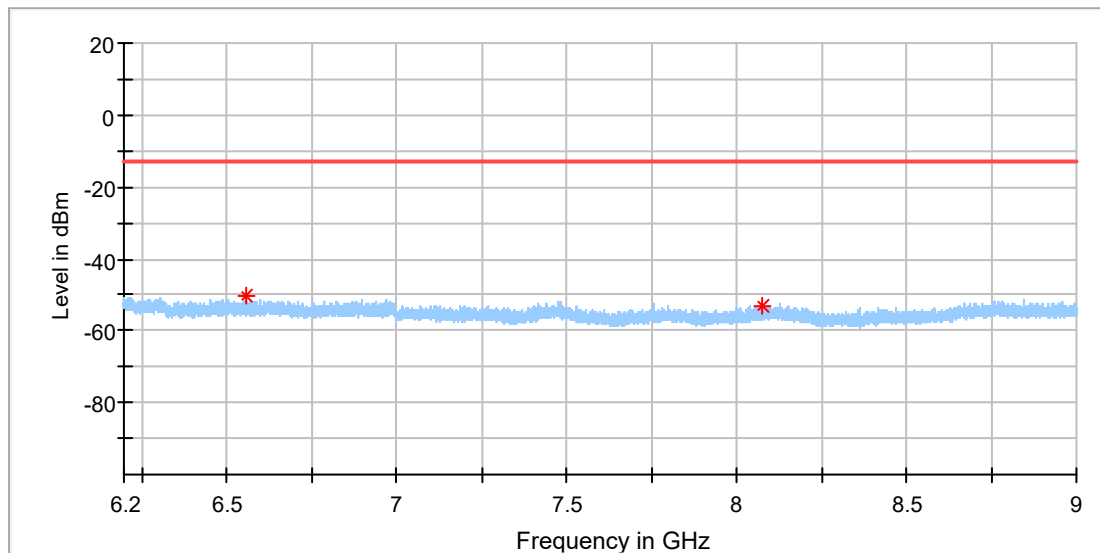
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 1434.500000     | -52.66        | -13.00      | 39.66       | 150.0       | V   | 36.0          | -91.6      |
| 2838.500000     | -47.23        | -13.00      | 34.23       | 150.0       | V   | 137.0         | -85.4      |
| 4736.000000     | -42.41        | -13.00      | 29.41       | 150.0       | V   | 313.0         | -81.7      |

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Test report no.

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## EUT Information

|                     |                                 |
|---------------------|---------------------------------|
| EUT Name:           | WisGate Edge Prime              |
| Model:              | RAK7240CV2                      |
| Test Mode:          | LTE Band 13_5M_QPSK_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002        |
| Test Voltage::      | AC 120V/60Hz                    |
| Remark:             | Temp 24 Humi:50%                |
| Test Standard:      | FCC Part 27                     |
| Tested By:          | Kei Zhang                       |
| Reviewed By:        | Terry Yin                       |



## Critical\_Freqs

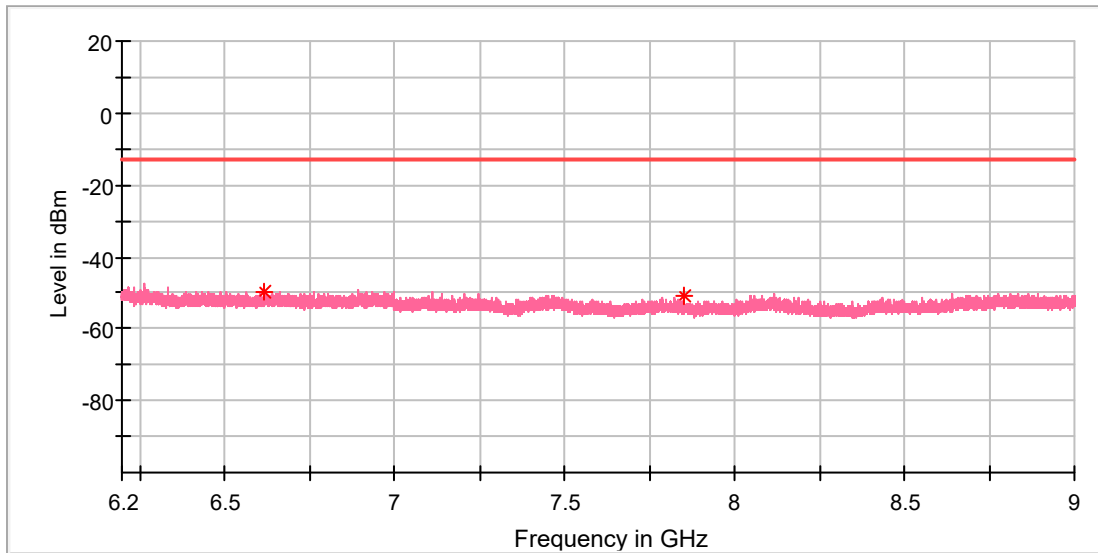
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 6558.166667     | -50.17        | -13.00      | 37.17       | 150.0       | H   | 240.0         | -88.7      |
| 8075.066667     | -53.24        | -13.00      | 40.24       | 150.0       | H   | 26.0          | -88.5      |

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*Test report no.*

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## EUT Information

|                     |                                 |
|---------------------|---------------------------------|
| EUT Name:           | WisGate Edge Prime              |
| Model:              | RAK7240CV2                      |
| Test Mode:          | LTE Band 13_5M_QPSK_Mid channel |
| Order No/Sample No: | 168520158/A003893351-002        |
| Test Voltage::      | AC 120V/60Hz                    |
| Remark:             | Temp 24 Humi:50%                |
| Test Standard:      | FCC Part 27                     |
| Tested By:          | Kei Zhang                       |
| Reviewed By:        | Terry Yin                       |



## Critical\_Freqs

| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 6618.833333     | -49.52        | -13.00      | 36.52       | 150.0       | V   | 8.0           | -87.0      |
| 7852.583333     | -50.71        | -13.00      | 37.71       | 150.0       | V   | 231.0         | -86.8      |

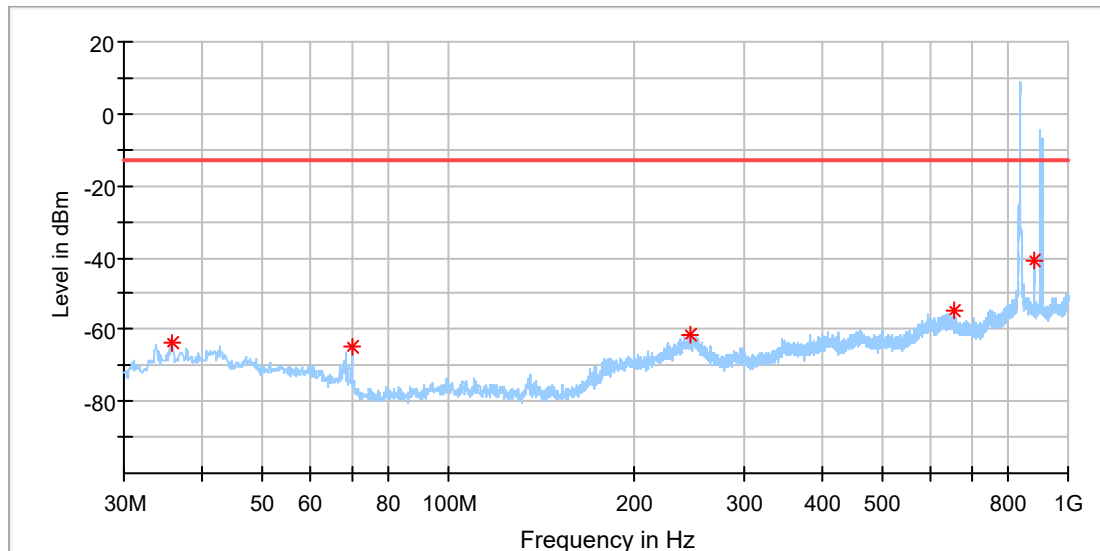
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Test report no.

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### 5.1.3 For Co-Tx

## EUT Information

|                     |                          |
|---------------------|--------------------------|
| EUT Name:           | WisGate Edge Prime       |
| Model:              | RAK7240CV2               |
| Test Mode:          | WIFI 2.4G+Lora+WCDMA V   |
| Order No/Sample No: | 168520158/A003893351-002 |
| Test Voltage::      | AC 120V/60Hz             |
| Remark:             | Temp 24 Humi:50%         |
| Test Standard:      | FCC Part 22              |
| Tested By:          | Kei Zhang                |
| Reviewed By:        | Terry Yin                |



## Critical Freqs

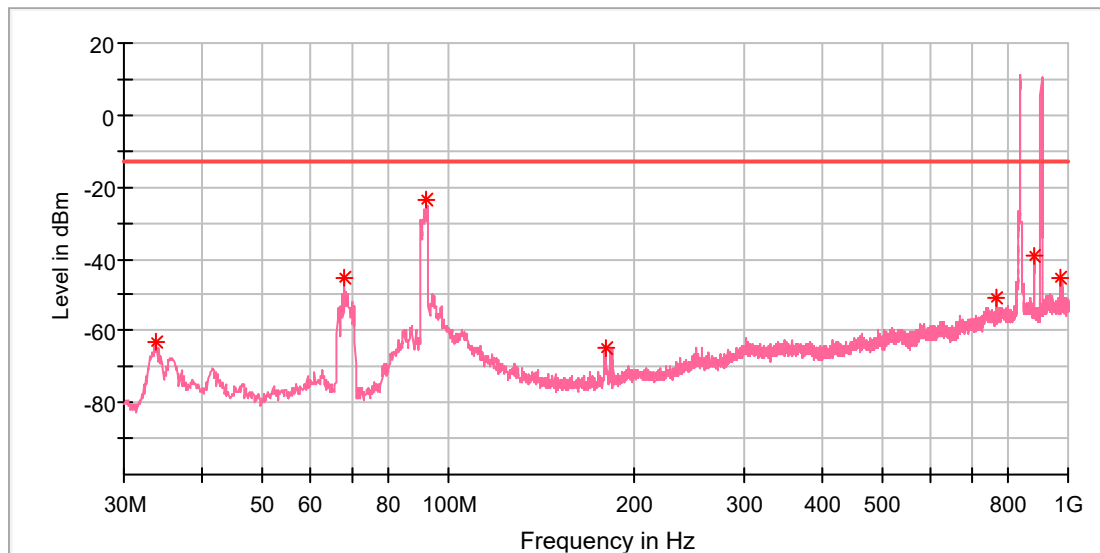
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 35.941250       | -63.82        | -13.00      | 50.82       | 100.0       | H   | 40.0          | -113.6     |
| 69.891250       | -64.58        | -13.00      | 51.58       | 100.0       | H   | 165.0         | -122.2     |
| 245.461250      | -61.66        | -13.00      | 48.66       | 100.0       | H   | 185.0         | -110.0     |
| 654.922500      | -54.88        | -13.00      | 41.88       | 100.0       | H   | 0.0           | -104.7     |
| 881.053750      | -40.93        | -13.00      | 27.93       | 100.0       | H   | 306.0         | -102.0     |

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## EUT Information

|                     |                          |
|---------------------|--------------------------|
| EUT Name:           | WisGate Edge Prime       |
| Model:              | RAK7240CV2               |
| Test Mode:          | WIFI 2.4G+Lora+WCDMA V   |
| Order No/Sample No: | 168520158/A003893351-002 |
| Test Voltage::      | AC 120V/60Hz             |
| Remark:             | Temp 24 Humi:50%         |
| Test Standard:      | FCC Part 22              |
| Tested By:          | Kei Zhang                |
| Reviewed By:        | Terry Yin                |



## Critical\_Freqs

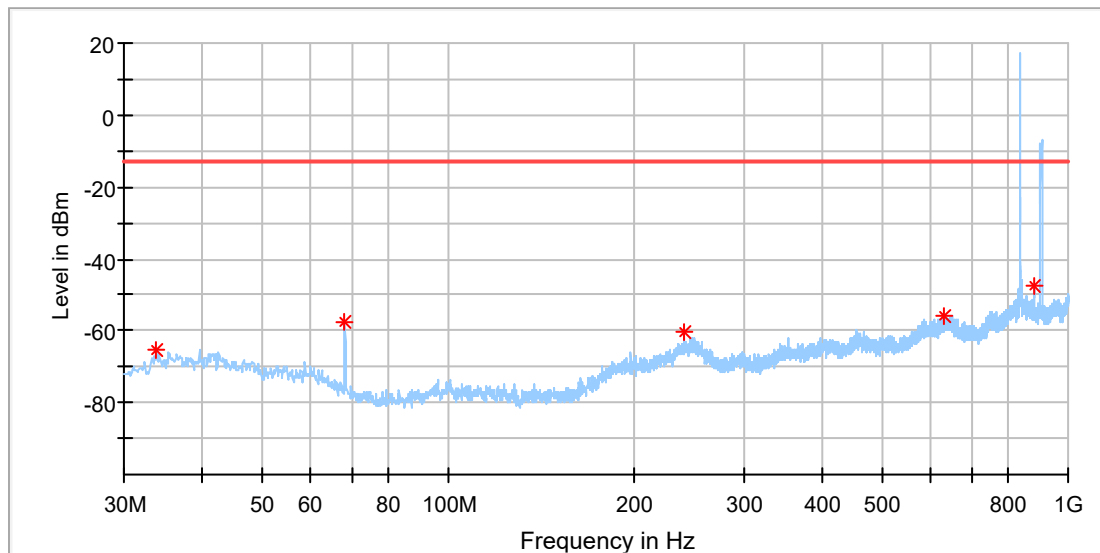
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 33.880000       | -63.22        | -13.00      | 50.22       | 100.0       | V   | 328.0         | -129.2     |
| 67.951250       | -45.22        | -13.00      | 32.22       | 100.0       | V   | 333.0         | -122.8     |
| 92.322500       | -23.51        | -13.00      | 10.51       | 100.0       | V   | 314.0         | -104.6     |
| 179.137500      | -64.83        | -13.00      | 51.83       | 100.0       | V   | 314.0         | -120.1     |
| 766.108750      | -50.94        | -13.00      | 37.94       | 100.0       | V   | 333.0         | -103.1     |
| 882.266250      | -39.34        | -13.00      | 26.34       | 100.0       | V   | 259.0         | -102.4     |
| 973.325000      | -45.16        | -13.00      | 32.16       | 100.0       | V   | 64.0          | -100.6     |

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## EUT Information

|                     |                           |
|---------------------|---------------------------|
| EUT Name:           | WisGate Edge Prime        |
| Model:              | RAK7240CV2                |
| Test Mode:          | WIFI 2.4G+Lora+LTE Band 5 |
| Order No/Sample No: | 168520158/A003893351-002  |
| Test Voltage::      | AC 120V/60Hz              |
| Remark:             | Temp 24 Humi:50%          |
| Test Standard:      | FCC Part 22               |
| Tested By:          | Kei Zhang                 |
| Reviewed By:        | Terry Yin                 |



## Critical\_Freqs

| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 33.880000       | -65.37        | -13.00      | 52.37       | 100.0       | H   | 37.0          | -117.0     |
| 68.072500       | -57.44        | -13.00      | 44.44       | 100.0       | H   | 217.0         | -121.4     |
| 240.247500      | -60.33        | -13.00      | 47.33       | 100.0       | H   | 23.0          | -110.5     |
| 632.855000      | -56.17        | -13.00      | 43.17       | 100.0       | H   | 92.0          | -104.7     |
| 881.417500      | -47.50        | -13.00      | 34.50       | 100.0       | H   | 303.0         | -102.0     |

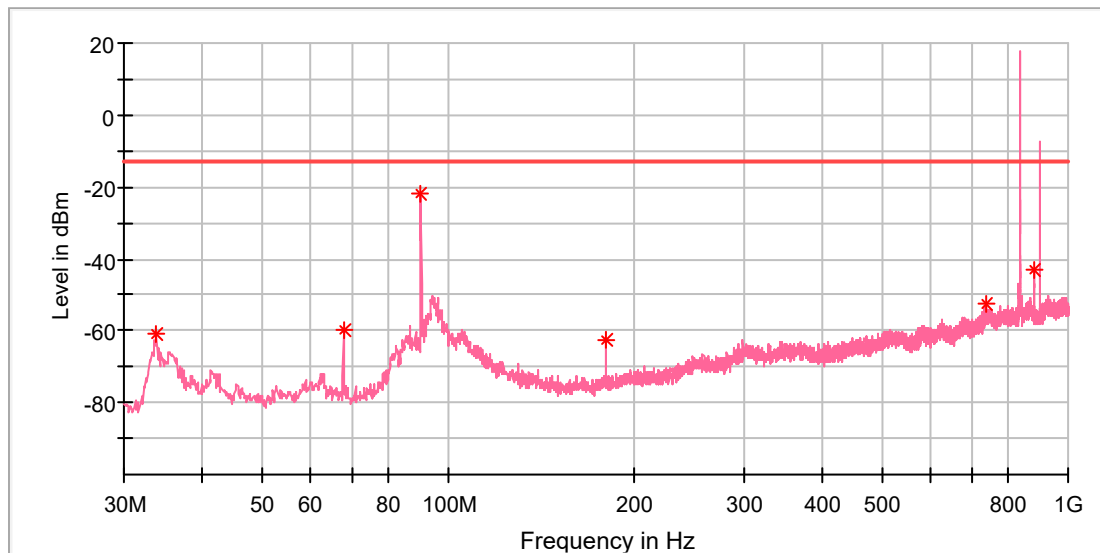


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## EUT Information

|                     |                           |
|---------------------|---------------------------|
| EUT Name:           | WisGate Edge Prime        |
| Model:              | RAK7240CV2                |
| Test Mode:          | WIFI 2.4G+Lora+LTE Band 5 |
| Order No/Sample No: | 168520158/A003893351-002  |
| Test Voltage::      | AC 120V/60Hz              |
| Remark:             | Temp 24 Humi:50%          |
| Test Standard:      | FCC Part 22               |
| Tested By:          | Kei Zhang                 |
| Reviewed By:        | Terry Yin                 |



## Critical\_Freqs

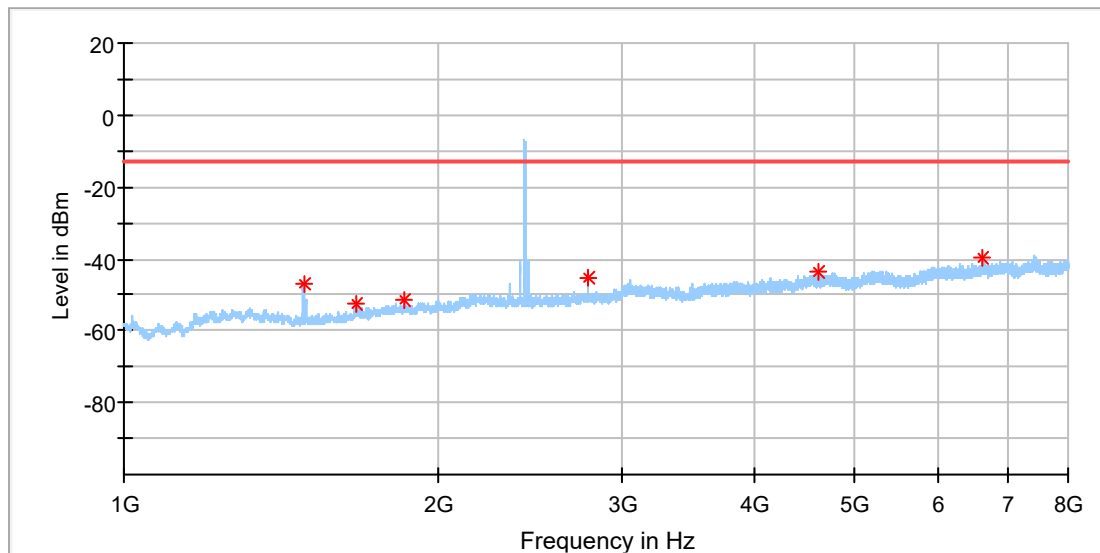
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 33.880000       | -60.91        | -13.00      | 47.91       | 100.0       | V   | 309.0         | -129.2     |
| 67.830000       | -59.82        | -13.00      | 46.82       | 100.0       | V   | 66.0          | -122.8     |
| 90.261250       | -21.83        | -13.00      | 8.83        | 100.0       | V   | 309.0         | -109.9     |
| 179.986250      | -62.79        | -13.00      | 49.79       | 100.0       | V   | 309.0         | -120.1     |
| 736.160000      | -52.52        | -13.00      | 39.52       | 100.0       | V   | 19.0          | -102.0     |
| 881.902500      | -42.84        | -13.00      | 29.84       | 100.0       | V   | 235.0         | -102.4     |

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## EUT Information

|                     |                          |
|---------------------|--------------------------|
| EUT Name:           | WisGate Edge Prime       |
| Model:              | RAK7240CV2               |
| Test Mode:          | WIFI 2.4G+Lora+WCDMA V   |
| Order No/Sample No: | 168520158/A003893351-002 |
| Test Voltage::      | AC 120V/60Hz             |
| Remark:             | Temp 24 Humi:50%         |
| Test Standard:      | FCC Part 22              |
| Tested By:          | Kei Zhang                |
| Reviewed By:        | Terry Yin                |



## Critical\_Freqs

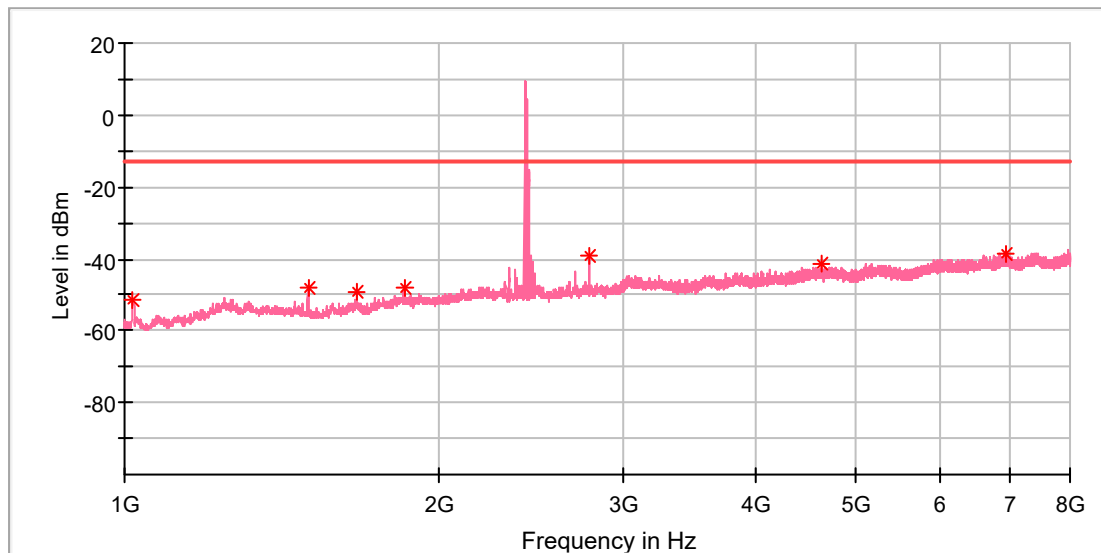
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 1483.500000     | -46.99        | -13.00      | 33.99       | 150.0       | H   | 26.0          | -94.4      |
| 1666.000000     | -52.67        | -13.00      | 39.67       | 150.0       | H   | 101.0         | -92.4      |
| 1855.500000     | -51.46        | -13.00      | 38.46       | 150.0       | H   | 285.0         | -90.4      |
| 2783.500000     | -45.36        | -13.00      | 32.36       | 150.0       | H   | 291.0         | -87.6      |
| 4614.000000     | -43.83        | -13.00      | 30.83       | 150.0       | H   | 300.0         | -82.7      |
| 6633.000000     | -39.84        | -13.00      | 26.85       | 150.0       | H   | 95.0          | -79.6      |

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Test report no.

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## EUT Information

EUT Name: WisGate Edge Prime  
Model: RAK7240CV2  
Test Mode: WIFI 2.4G+Lora+WCDMA V  
Order No/Sample No: 168520158/A003893351-002  
Test Voltage:: AC 120V/60Hz  
Remark: Temp 24 Humi:50%  
Test Standard: FCC Part 22  
Tested By: Kei Zhang  
Reviewed By: Terry Yin



## Critical\_Freqs

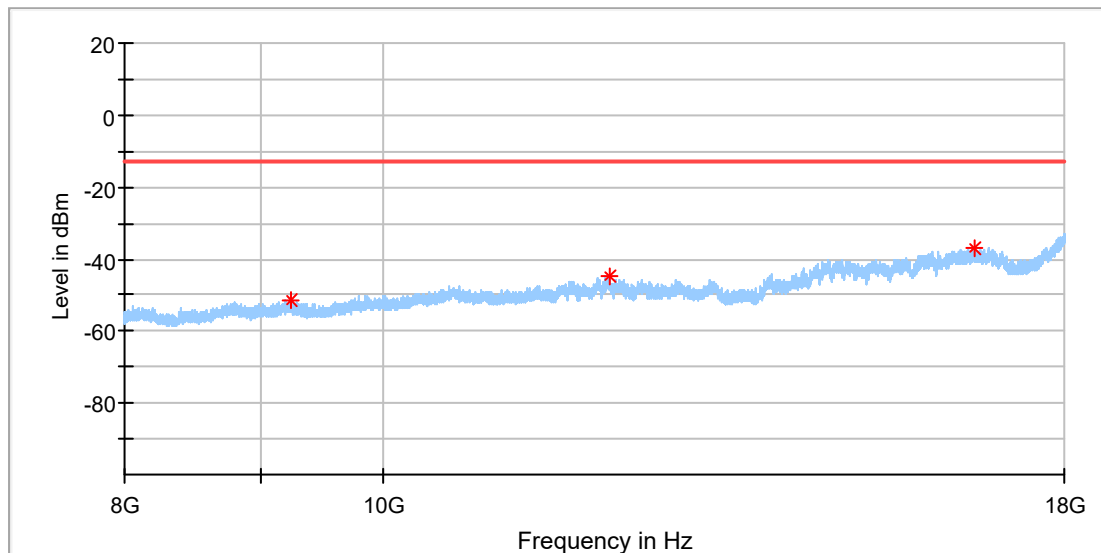
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 1020.000000     | -51.60        | -13.00      | 38.60       | 150.0       | V   | 304.0         | -93.8      |
| 1496.500000     | -48.12        | -13.00      | 35.12       | 150.0       | V   | 299.0         | -92.3      |
| 1666.000000     | -49.45        | -13.00      | 36.45       | 150.0       | V   | 262.0         | -90.2      |
| 1855.500000     | -48.14        | -13.00      | 35.14       | 150.0       | V   | 151.0         | -88.2      |
| 2783.000000     | -39.23        | -13.00      | 26.23       | 150.0       | V   | 0.0           | -85.7      |
| 4627.500000     | -41.15        | -13.00      | 28.15       | 150.0       | V   | 208.0         | -80.9      |
| 6934.000000     | -38.47        | -13.00      | 25.47       | 150.0       | V   | 292.0         | -77.1      |

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Test report no.

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## EUT Information

EUT Name: WisGate Edge Prime  
Model: RAK7240CV2  
Test Mode: WIFI 2.4G+Lora+WCDMA V  
Order No/Sample No: 168520158/A003893351-002  
Test Voltage:: AC 120V/60Hz  
Remark: Temp 24 Humi:50%  
Test Standard: FCC Part 22  
Tested By: Kei Zhang  
Reviewed By: Terry Yin

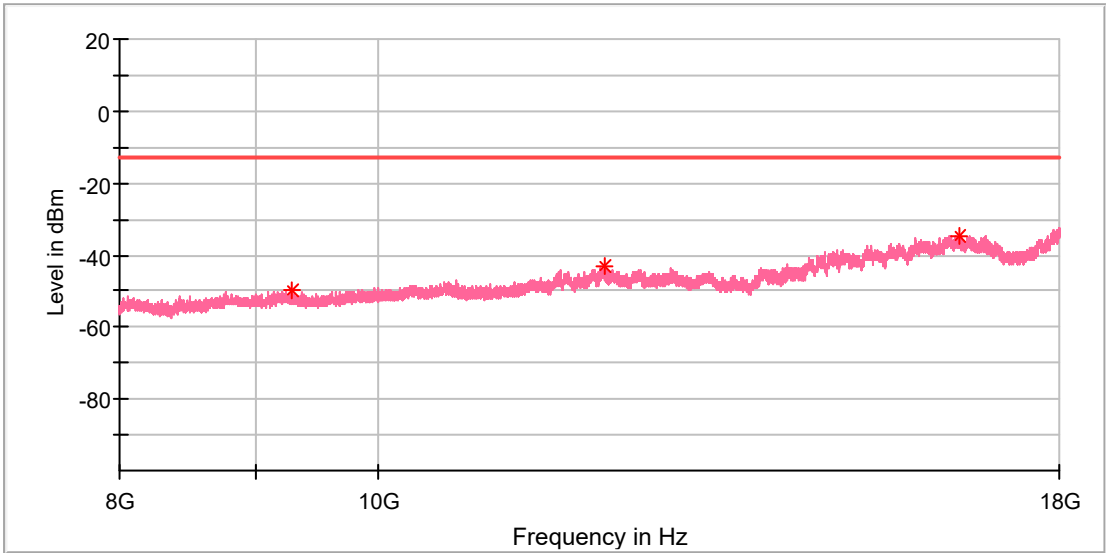


## Critical\_Freqs

| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 9235.000000     | -51.42        | -13.00      | 38.42       | 150.0       | H   | 347.0         | -85.8      |
| 12150.500000    | -44.76        | -13.00      | 31.76       | 150.0       | H   | 329.0         | -79.6      |
| 16652.500000    | -37.07        | -13.00      | 24.07       | 150.0       | H   | 168.0         | -73.2      |

**EUT Information**

EUT Name: WisGate Edge Prime  
 Model: RAK7240CV2  
 Test Mode: WIFI 2.4G+Lora+WCDMA V  
 Order No/Sample No: 168520158/A003893351-002  
 Test Voltage:: AC 120V/60Hz  
 Remark: Temp 24 Humi:50%  
 Test Standard: FCC Part 22  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



**Critical\_Freqs**

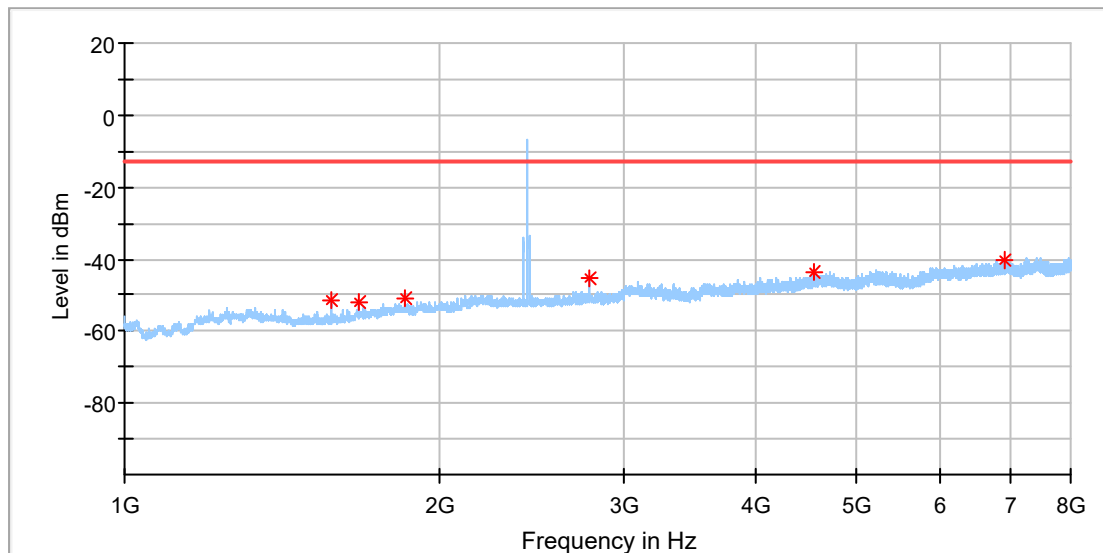
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 9279.000000     | -49.76        | -13.00      | 36.76       | 150.0       | V   | 286.0         | -84.0      |
| 12152.500000    | -42.87        | -13.00      | 29.87       | 150.0       | V   | 337.0         | -77.8      |
| 16507.500000    | -34.51        | -13.00      | 21.51       | 150.0       | V   | 315.0         | -70.8      |

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Test report no.

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## EUT Information

|                     |                           |
|---------------------|---------------------------|
| EUT Name:           | WisGate Edge Prime        |
| Model:              | RAK7240CV2                |
| Test Mode:          | WIFI 2.4G+Lora+LTE Band 5 |
| Order No/Sample No: | 168520158/A003893351-002  |
| Test Voltage::      | AC 120V/60Hz              |
| Remark:             | Temp 24 Humi:50%          |
| Test Standard:      | FCC Part 22               |
| Tested By:          | Kei Zhang                 |
| Reviewed By:        | Terry Yin                 |



## Critical\_Freqs

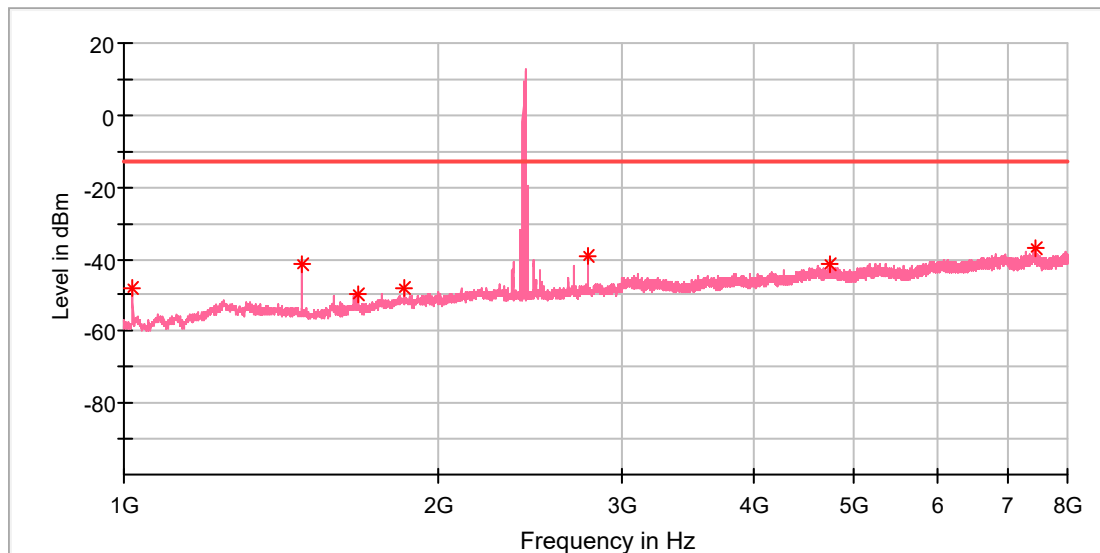
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 1574.500000     | -51.22        | -13.00      | 38.22       | 150.0       | H   | 30.0          | -93.7      |
| 1672.000000     | -52.18        | -13.00      | 39.18       | 150.0       | H   | 230.0         | -92.5      |
| 1854.500000     | -50.65        | -13.00      | 37.65       | 150.0       | H   | 119.0         | -90.4      |
| 2782.500000     | -45.16        | -13.00      | 32.16       | 150.0       | H   | 284.0         | -87.6      |
| 4561.500000     | -43.66        | -13.00      | 30.66       | 150.0       | H   | 139.0         | -82.9      |
| 6904.000000     | -40.07        | -13.00      | 27.07       | 150.0       | H   | 3.0           | -79.0      |

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Test report no.

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## EUT Information

|                     |                           |
|---------------------|---------------------------|
| EUT Name:           | WisGate Edge Prime        |
| Model:              | RAK7240CV2                |
| Test Mode:          | WIFI 2.4G+Lora+LTE Band 5 |
| Order No/Sample No: | 168520158/A003893351-002  |
| Test Voltage::      | AC 120V/60Hz              |
| Remark:             | Temp 24 Humi:50%          |
| Test Standard:      | FCC Part 22               |
| Tested By:          | Kei Zhang                 |
| Reviewed By:        | Terry Yin                 |



## Critical\_Freqs

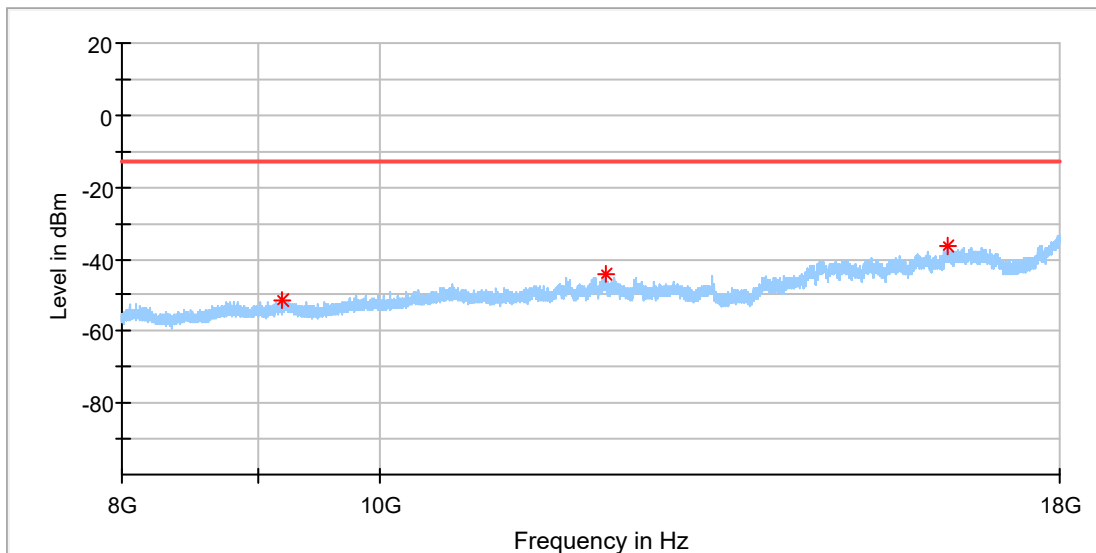
| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 1019.000000     | -47.95        | -13.00      | 34.95       | 150.0       | V   | 40.0          | -93.8      |
| 1482.000000     | -41.43        | -13.00      | 28.43       | 150.0       | V   | 278.0         | -92.1      |
| 1672.000000     | -49.55        | -13.00      | 36.55       | 150.0       | V   | 320.0         | -90.5      |
| 1855.000000     | -48.13        | -13.00      | 35.13       | 150.0       | V   | 88.0          | -88.2      |
| 2783.500000     | -39.27        | -13.00      | 26.27       | 150.0       | V   | 284.0         | -85.7      |
| 4744.500000     | -41.66        | -13.00      | 28.66       | 150.0       | V   | 317.0         | -80.8      |
| 7456.000000     | -36.89        | -13.00      | 23.89       | 150.0       | V   | 260.0         | -75.8      |

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## EUT Information

EUT Name: WisGate Edge Prime  
Model: RAK7240CV2  
Test Mode: WIFI 2.4G+Lora+LTE Band 5  
Order No/Sample No: 168520158/A003893351-002  
Test Voltage:: AC 120V/60Hz  
Remark: Temp 24 Humi:50%  
Test Standard: FCC Part 22  
Tested By: Kei Zhang  
Reviewed By: Terry Yin



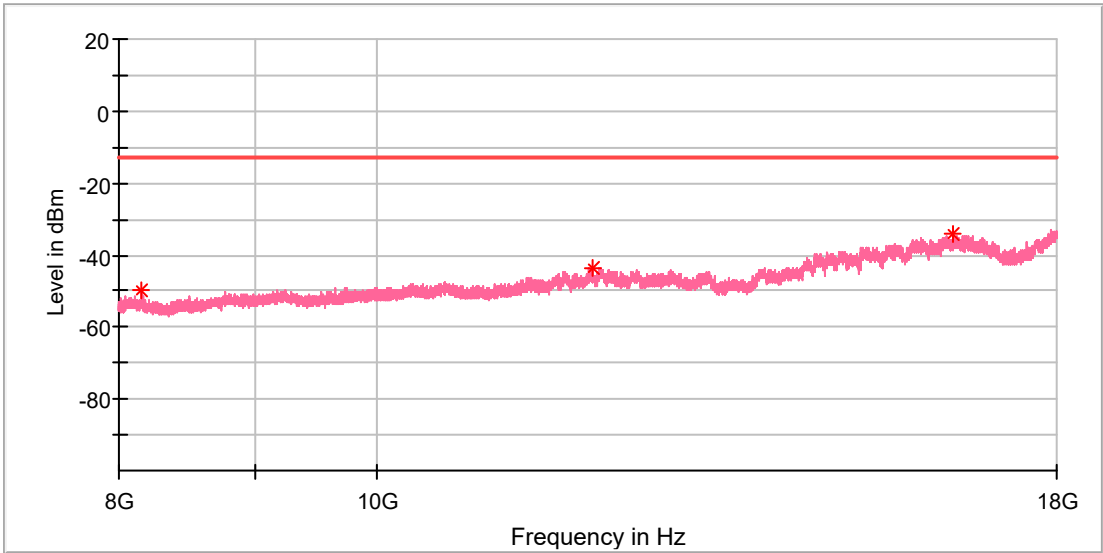
## Critical\_Freqs

| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 9190.500000     | -51.26        | -13.00      | 38.26       | 150.0       | H   | 0.0           | -85.9      |
| 12147.000000    | -44.38        | -13.00      | 31.38       | 150.0       | H   | 59.0          | -79.6      |
| 16351.000000    | -36.52        | -13.00      | 23.52       | 150.0       | H   | 28.0          | -73.4      |



**EUT Information**

EUT Name: WisGate Edge Prime  
 Model: RAK7240CV2  
 Test Mode: WIFI 2.4G+Lora+LTE Band 5  
 Order No/Sample No: 168520158/A003893351-002  
 Test Voltage:: AC 120V/60Hz  
 Remark: Temp 24 Humi:50%  
 Test Standard: FCC Part 22  
 Tested By: Kei Zhang  
 Reviewed By: Terry Yin



**Critical\_Freqs**

| Frequency (MHz) | MaxPeak (dBm) | Limit (dBm) | Margin (dB) | Height (cm) | Pol | Azimuth (deg) | Corr. (dB) |
|-----------------|---------------|-------------|-------------|-------------|-----|---------------|------------|
| 8160.500000     | -50.04        | -13.00      | 37.04       | 150.0       | V   | 0.0           | -86.6      |
| 12057.500000    | -43.66        | -13.00      | 30.66       | 150.0       | V   | 264.0         | -78.5      |
| 16461.500000    | -34.10        | -13.00      | 21.10       | 150.0       | V   | 18.0          | -70.8      |

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## 5.2 Conducted emissions

**RESULT:**

**Pass**

### Test Specification

|                   |                                            |
|-------------------|--------------------------------------------|
| Test standard     | : FCC Part 15.207(a)<br>RSS-Gen Clause 8.8 |
| Basic standard    | : ANSI C63.10: 2013                        |
| Frequency range   | : 150KHz - 30MHz                           |
| Classification    | : Class B                                  |
| Limit             | : FCC Part 15.207(a)<br>RSS-Gen Table 4    |
| Kind of test site | : Shielded Room                            |

### Test Setup

|                      |                           |
|----------------------|---------------------------|
| Date of testing      | : 2025-01-06 - 2025-02-11 |
| Input voltage        | : AC 120V, 60Hz           |
| Operation mode       | : A, B                    |
| Earthing             | : Not Connected           |
| Ambient temperature  | : Refer to test data      |
| Relative humidity    | : Refer to test data      |
| Atmospheric pressure | : 101 kPa                 |

For the measurement records, refer to the following plots, only the worst case mode are shown in this report.

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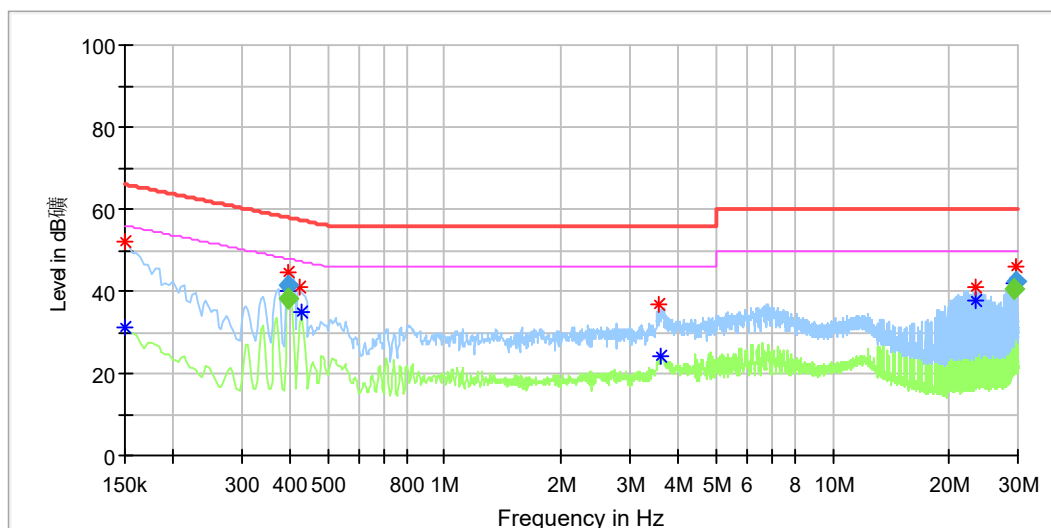
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## EUT Information

EUT Name: WisGate Edge Prime  
Order Number: 168520158  
Model: RAK7240CV2  
Test Mode: On, WIFI link + LTE link + Lora link, powered by POE Adapter  
Test Voltage: AC 120V60Hz  
Test Standard: FCC Part 15B  
Test By:/Review By: Charlie Zha / Shower Dai  
Tem./Hum./Pressure: 24.0°C/50.4%/101kPa  
Remark: SR3



## Critical\_Freqs

| Frequency (MHz) | MaxPeak (dBμV) | Average (dBμV) | Limit (dBμV) | Margin (dB) | Line | Corr. (dB) |
|-----------------|----------------|----------------|--------------|-------------|------|------------|
| 0.150000        | ---            | 31.25          | 56.00        | 24.75       | L1   | 9.8        |
| 0.150000        | 52.03          | ---            | 66.00        | 13.97       | L1   | 9.8        |
| 0.395494        | 44.52          | ---            | 57.95        | 13.42       | L1   | 9.9        |
| 0.395494        | ---            | 40.14          | 47.95        | 7.81        | L1   | 9.9        |
| 0.422381        | 40.83          | ---            | 57.40        | 16.57       | L1   | 9.9        |
| 0.426113        | ---            | 34.69          | 47.33        | 12.63       | L1   | 9.9        |
| 3.571556        | 36.57          | ---            | 56.00        | 19.43       | L1   | 10.1       |
| 3.605138        | ---            | 24.05          | 46.00        | 21.95       | L1   | 10.1       |
| 23.306138       | ---            | 37.90          | 50.00        | 12.10       | L1   | 10.1       |
| 23.306138       | 40.93          | ---            | 60.00        | 19.07       | L1   | 10.1       |
| 29.320412       | ---            | 41.74          | 50.00        | 8.26        | L1   | 10.1       |
| 29.824400       | 45.89          | ---            | 60.00        | 14.11       | L1   | 10.1       |

## Final\_Result

| Frequency (MHz) | QuasiPeak (dBμV) | Average (dBμV) | Limit (dBμV) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Line | Corr. (dB) |
|-----------------|------------------|----------------|--------------|-------------|-----------------|-----------------|------|------------|
| 0.395494        | ---              | 38.05          | 47.95        | 9.89        | 1000.0          | 9.000           | L1   | 9.9        |
| 0.395494        | 41.43            | ---            | 57.95        | 16.51       | 1000.0          | 9.000           | L1   | 9.9        |
| 29.320412       | ---              | 40.46          | 50.00        | 9.54        | 1000.0          | 9.000           | L1   | 10.1       |
| 29.824400       | 42.10            | ---            | 60.00        | 17.90       | 1000.0          | 9.000           | L1   | 10.1       |

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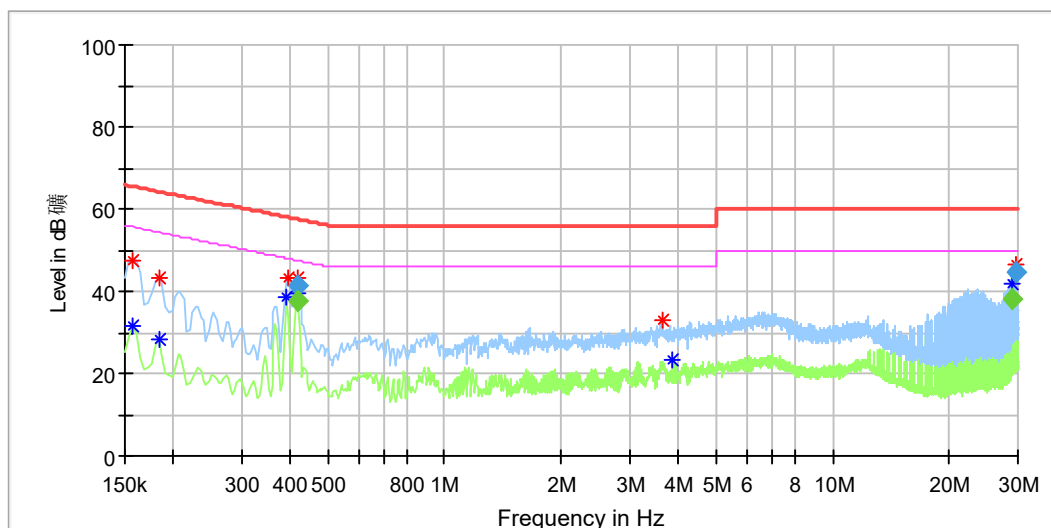
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## EUT Information

EUT Name: WisGate Edge Prime  
Order Number: 168520158  
Model: RAK7240CV2  
Test Mode: On, WIFI link + LTE link + Lora link, powered by POE Adapter  
Test Voltage: AC 120V60Hz  
Test Standard: FCC Part 15B  
Test By:/Review By: Charlie Zha / Shower Dai  
Tem./Hum./Pressure: 24.0°C/50.4%/101kPa  
Remark: SR3



## Critical\_Freqs

| Frequency (MHz) | MaxPeak (dBμV) | Average (dBμV) | Limit (dBμV) | Margin (dB) | Line | Corr. (dB) |
|-----------------|----------------|----------------|--------------|-------------|------|------------|
| 0.157463        | ---            | 31.41          | 55.60        | 24.19       | N    | 9.7        |
| 0.157463        | 47.55          | ---            | 65.60        | 18.05       | N    | 9.7        |
| 0.183581        | ---            | 28.50          | 54.32        | 25.83       | N    | 9.7        |
| 0.183581        | 43.27          | ---            | 64.32        | 21.05       | N    | 9.7        |
| 0.392531        | ---            | 38.69          | 48.01        | 9.32        | N    | 9.7        |
| 0.396263        | 43.16          | ---            | 57.93        | 14.77       | N    | 9.7        |
| 0.417650        | 43.14          | ---            | 57.48        | 14.33       | N    | 9.7        |
| 0.417919        | ---            | 39.33          | 47.55        | 8.22        | N    | 9.7        |
| 3.627525        | 32.90          | ---            | 56.00        | 23.10       | N    | 9.8        |
| 3.870056        | ---            | 23.48          | 46.00        | 22.52       | N    | 9.8        |
| 29.069919       | ---            | 41.83          | 50.00        | 8.17        | N    | 10.1       |
| 29.819900       | 46.66          | ---            | 60.00        | 13.34       | N    | 10.2       |

## Final\_Result

| Frequency (MHz) | QuasiPeak (dBμV) | Average (dBμV) | Limit (dBμV) | Margin (dB) | Meas. Time (ms) | Bandwidth (kHz) | Line | Corr. (dB) |
|-----------------|------------------|----------------|--------------|-------------|-----------------|-----------------|------|------------|
| 0.417650        | 41.47            | ---            | 57.50        | 16.03       | 1000.0          | 9.000           | N    | 9.7        |
| 0.417919        | ---              | 37.89          | 47.49        | 9.60        | 1000.0          | 9.000           | N    | 9.7        |
| 29.069919       | ---              | 38.25          | 50.00        | 11.75       | 1000.0          | 9.000           | N    | 10.1       |
| 29.819900       | 44.63            | ---            | 60.00        | 15.37       | 1000.0          | 9.000           | N    | 10.2       |

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