

Prüfbericht-Nr.: no.:	CN25ANHW 002	Auftrags-Nr.: Order no.:	168520158	Seite 1 von 22 Page 1 of 22
Kunden-Referenz-Nr.: Client reference no.:	N/A	Auftragsdatum: Order date:	2024-12-20	
Auftraggeber: Client:	Shenzhen RAKwireless Technology Co.,Ltd. Room 506, Building B, New Compark, Pingshan First Road, Taoyuan Street, Nanshan District, Shenzhen, Guangdong, P.R. China			
Prüfgegenstand: Test item:	WisGate Edge Prime			
Bezeichnung / Typ-Nr.: Identification / Type no.:	RAK7240V2 (Trademark: )			
Auftrags-Inhalt: Order content:	CIIPC and C4PC			
Prüfgrundlage: Test specification:	CFR47 FCC Part 15: Subpart C Section 15.247		RSS-247 Issue 3	
Wareneingangsdatum: Date of sample receipt:	2024-12-20	Refer to photos documents		
Prüfmuster-Nr.: Test sample no.:	A003893351-007			
Prüfzeitraum: Testing period:	2025-01-06 - 2025-04-10			
Ort der Prüfung: Place of testing:	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüflaboratorium: Testing laboratory:	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfergebnis*: Test result*:	Pass			
geprüft von: tested by:	 Hardy Suo		genehmigt von: authorized by:	 Lin Lin
Datum: Date:	2025-04-16		Ausstellungsdatum: Issue date:	2025-04-16
Stellung / Position	Sachverständige(r)/Expert		Stellung / Position	Sachverständige(r)/Expert
Sonstiges / Other:	FCC ID: 2AF6B-RAK5146, IC: 25908-RAK5146 HMN: RAK7240V2 *The Wi-Fi module and Lora module are combination in a new host, the co-located radiated spurious emission testing was performed. ** This product contains transmitter modules, refer to clause 3.2 for details.			
Zustand des Prüfgegenstandes bei Anlieferung: Condition of the test item at delivery:	Prüfmuster vollständig und unbeschädigt Test item complete and undamaged			
* 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
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. 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.				

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Anmerkungen Remarks

1	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. Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden. <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>
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3	Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben. Abweichungen von Prüfspezifikation(en) oder Kundenanforderungen sind in der jeweiligen Prüfklausel im Bericht aufgeführt. <i>Test clauses with remark of * are subcontracted to qualified subcontractors and described under the respective test clause in the report.</i> <i>Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.</i>
4	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. <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>

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Test Summary

5.1 Co-Located 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 and 2.4GHz Wi-Fi wireless technologies.

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

Contains IC: 25908-RAK634, 25908-RAK5146.

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

RAK7240V2 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: RAK7240V2), radiated spurious emissions for 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:	RAK7240V2
HMN:	RAK7240V2
Operating Voltage:	DC 9-24V or 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) -10 °C ~ +40 °C (Use PoE adapter supply only)
POE adapter information:	Model: R012-4800500 Input: AC 100-240V, 50/60Hz, 0.6A Output: DC 48V, 0.3A, 24W Factory: Risunic Technology (ShenZhen) Co., Ltd.
Remark: This product assembles multi-transmitter modules: - Wi-Fi Module (FCC ID: 2AF6B-RAK634, IC: 25908-RAK634) - LoRa Concentrator Module (FCC ID: 2AF6B-RAK5146, IC: 25908-RAK5146)	

Technical Specification of Wi-Fi Module	
Characteristic	Description
Operating Frequency	2412 - 2462 MHz for 802.11b/g/n(HT20) 2422 - 2452 MHz for 802.11n(HT40)
Type of Modulation	DSSS(DBPSK/DQPSK/CCK) OFDM(BPSK/QPSK/16QAM/64QAM)
Data Rate:	1/2/5.5/11 Mbps for 802.11b 6/9/12/18/24/36/48/54 Mbps for 802.11g MCS0 ~ MCS7 for 802.11n
Channel Number:	1
Antenna Number:	2412 - 2462 MHz for 802.11b/g/n(HT20) 2422 - 2452 MHz for 802.11n(HT40)
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 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 Fiberglass Antenna (M/N: RAKARG19) with 5.1dBi, or Fiberglass Antenna (M/N: RAKARG14) with 5.8dBi, or Fiberglass Antenna (M/N: RAKARG15) with 8dBi (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 + 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.

4.3 Special Accessories and Auxiliary Equipment

Table 3: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model No.	Serial Number or Rating
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)

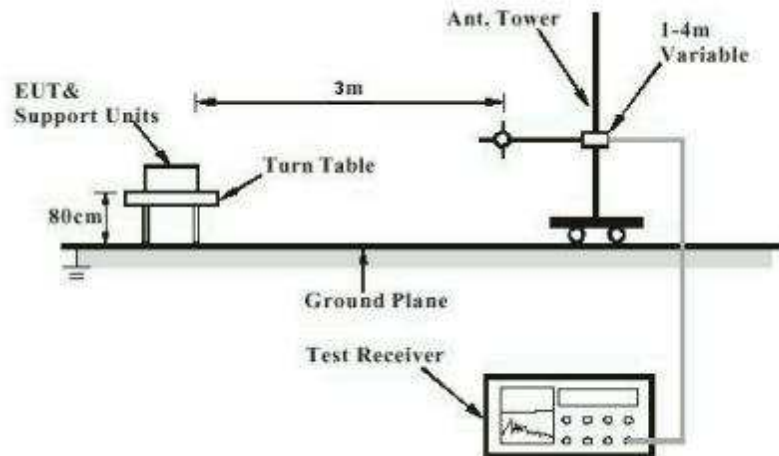


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

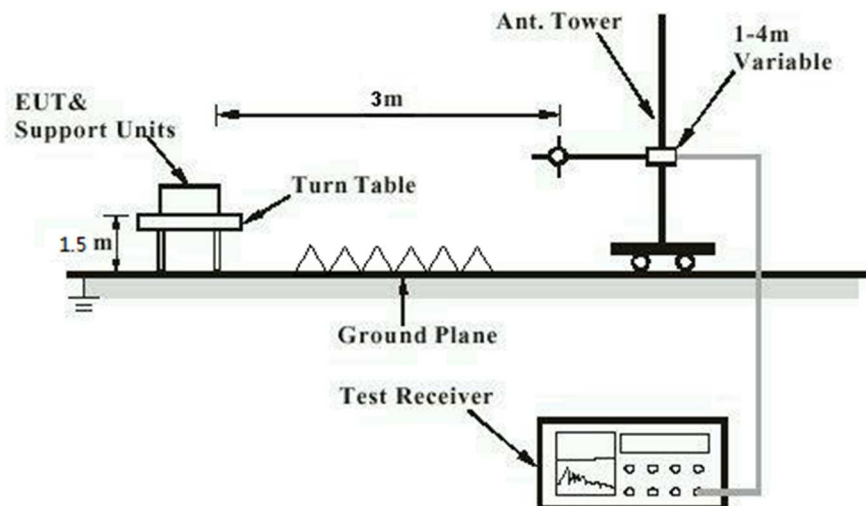
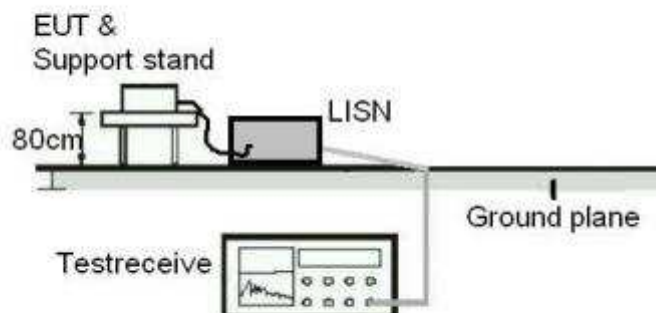


Diagram of Measurement Configuration for Mains Conduction Measurement



5 Test Results

5.1 Co-Located Radiated Spurious Emissions

RESULT:

Pass

Test Specification

Test standard	: CFR47 FCC Part 15: Subpart C Section 15.247 RSS-247 Issue 3
Basic standard	: ANSI C63.10
Limit	: KDB 996369 D04 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
Earthing	: Not Connected
Ambient temperature	: Refer to test data
Relative humidity	: Refer to test data
Atmospheric pressure	: 101 kPa

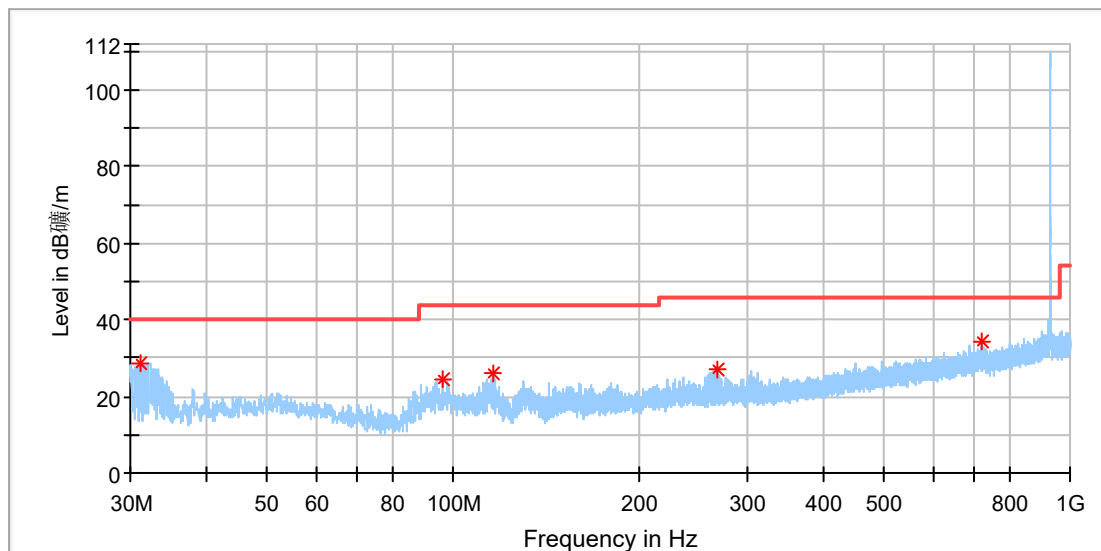
Note: The test plots of Co-located radiated spurious emissions beyond the limit are the fundamental radio frequency of Lora and Wi-Fi.
For the measurement records, refer to the following plots, only the worst case mode are shown in this report.

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EUT Information

EUT Name:	WisGate Edge Prime
Model:	RAK7240V2
Test Mode:	WIFI 2.4G+Lora
Order No/Sample No:	168520158/A003893351-003
Test Voltage::	Adaptor
Remark:	Temp 24 Humi:50%
Test Standard:	FCC Part 15C
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
31.044615	28.68	40.00	11.32	100.0	H	94.0	-22.9
96.482308	24.30	43.50	19.20	100.0	H	65.0	-19.6
116.292692	26.02	43.50	17.48	100.0	H	57.0	-20.1
267.836539	27.34	46.00	18.66	100.0	H	290.0	-17.0
721.274231	34.49	46.00	11.51	100.0	H	358.0	-7.5

Final Result

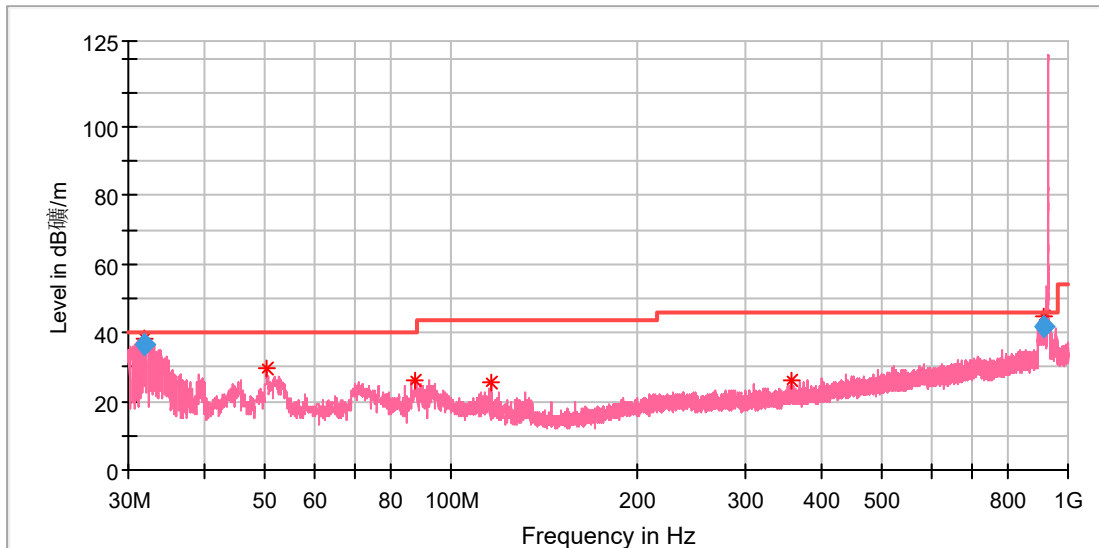
Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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EUT Information

EUT Name: WisGate Edge Prime
Model: RAK7240V2
Test Mode: WIFI 2.4G+Lora
Order No/Sample No: 168520158/A003893351-003
Test Voltage:: Adaptor
Remark: Temp 24 Humi:50%
Test Standard: FCC Part 15C
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
31.753462	38.32	40.00	1.68	100.0	V	72.0	-22.8
50.220769	29.55	40.00	10.45	100.0	V	266.0	-18.4
87.528462	26.37	40.00	13.63	100.0	V	86.0	-21.8
116.330000	25.60	43.50	17.90	100.0	V	108.0	-20.1
356.181154	25.94	46.00	20.06	100.0	V	286.0	-14.7
914.117692	44.53	46.00	1.47	100.0	V	57.0	-4.6

Final Result

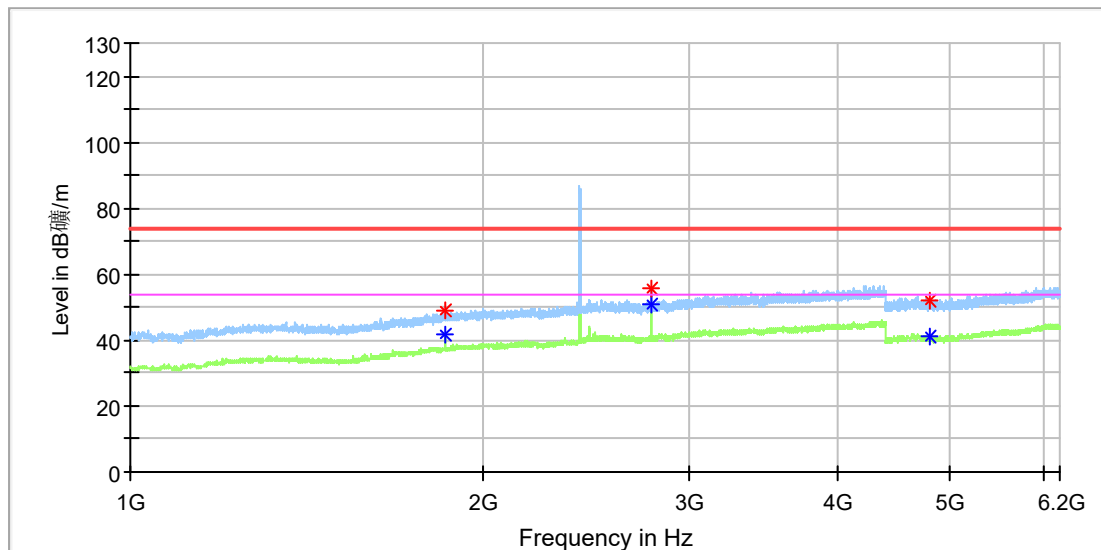
Frequency (MHz)	QuasiPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
31.766577	36.89	40.00	3.11	105.0	V	60.0	-22.8
913.727346	41.66	46.00	4.34	105.0	V	52.0	-4.7

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EUT Information

EUT Name: WisGate Edge Prime
Model: RAK7240V2
Test Mode: WIFI 2.4G+Lora
Order No/Sample No: 168520158/A003893351-003
Test Voltage:: Adaptor
Remark: Temp 24 Humi:50%
Test Standard: FCC Part 15C
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1850.500000	48.85	---	74.00	25.15	150.0	H	0.0	6.5
1854.500000	---	41.66	54.00	12.34	150.0	H	124.0	6.5
2782.000000	55.39	---	74.00	18.61	150.0	H	297.0	9.4
2783.500000	---	50.86	54.00	3.14	150.0	H	297.0	9.4
4803.000000	---	41.09	54.00	12.91	150.0	H	251.0	13.3
4806.500000	51.99	---	74.00	22.01	150.0	H	350.0	13.3

Final_Result

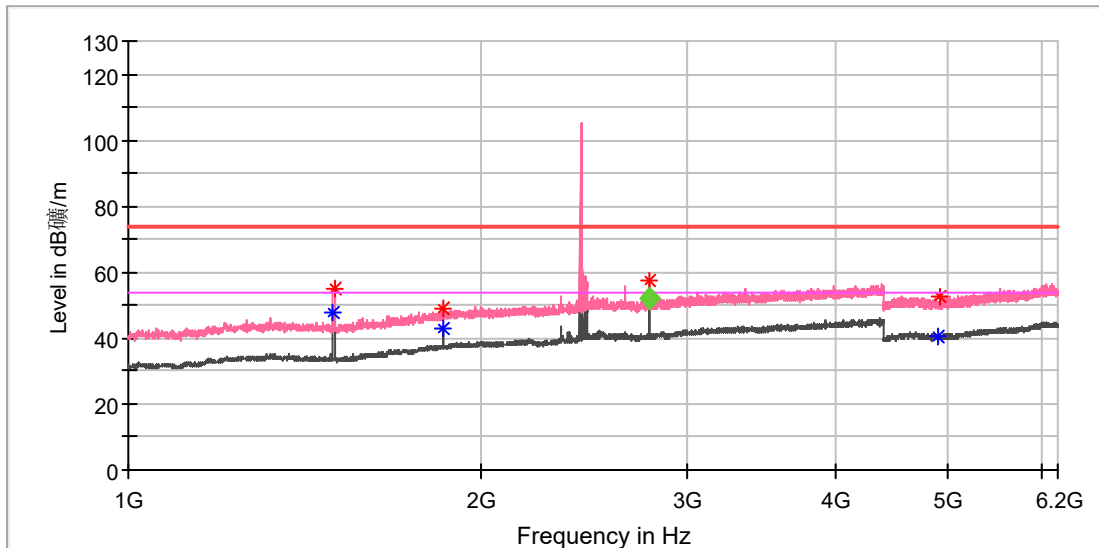
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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EUT Information

EUT Name: WisGate Edge Prime
Model: RAK7240V2
Test Mode: WIFI 2.4G+Lora
Order No/Sample No: 168520158/A003893351-003
Test Voltage:: Adaptor
Remark: Temp 24 Humi:50%
Test Standard: FCC Part 15C
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
1495.500000	---	47.85	54.00	6.15	150.0	V	357.0	2.7
1496.500000	55.29	---	74.00	18.71	150.0	V	357.0	2.7
1855.000000	49.11	---	74.00	24.89	150.0	V	201.0	6.5
1855.000000	---	43.18	54.00	10.82	150.0	V	201.0	6.5
2782.500000	57.73	---	74.00	16.27	150.0	V	94.0	9.4
4900.500000	---	40.76	54.00	13.24	150.0	V	263.0	13.3
4923.000000	52.41	---	74.00	21.59	150.0	V	78.0	13.3

Final Result

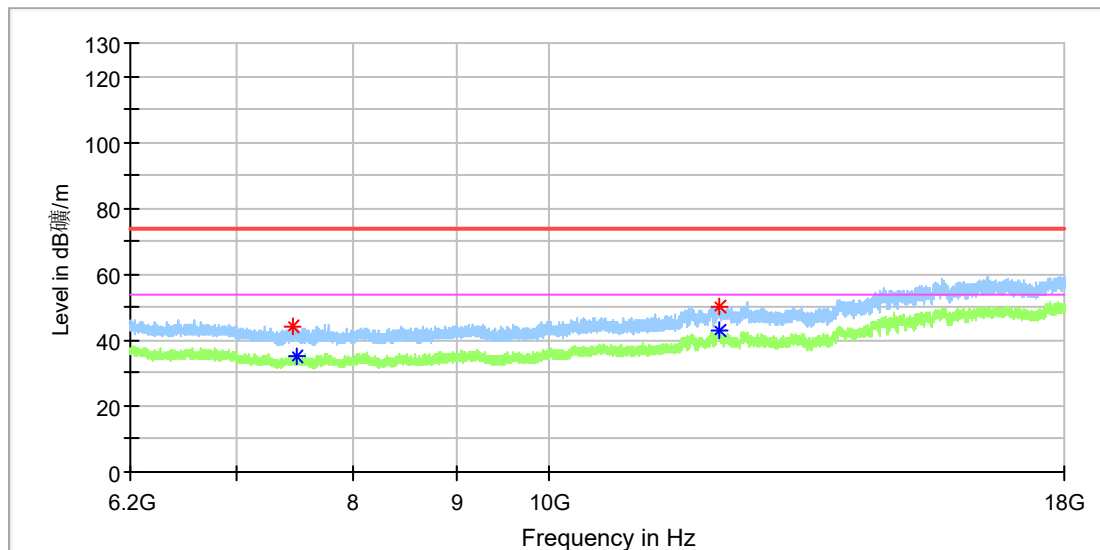
Frequency (MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2782.385294	51.85	54.00	2.15	148.0	V	89.0	9.4

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EUT Information

EUT Name: WisGate Edge Prime
Model: RAK7240V2
Test Mode: WIFI 2.4G+Lora
Order No/Sample No: 168520158/A003893351-003
Test Voltage:: Adaptor
Remark: Temp 24 Humi:50%
Test Standard: FCC Part 15C
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7468.008333	44.43	---	74.00	29.57	150.0	H	112.0	8.6
7501.933333	---	35.22	54.00	18.78	150.0	H	191.0	8.7
12142.775000	50.48	---	74.00	23.52	150.0	H	347.0	16.5
12150.150000	---	42.74	54.00	11.26	150.0	H	326.0	16.7

Final Result

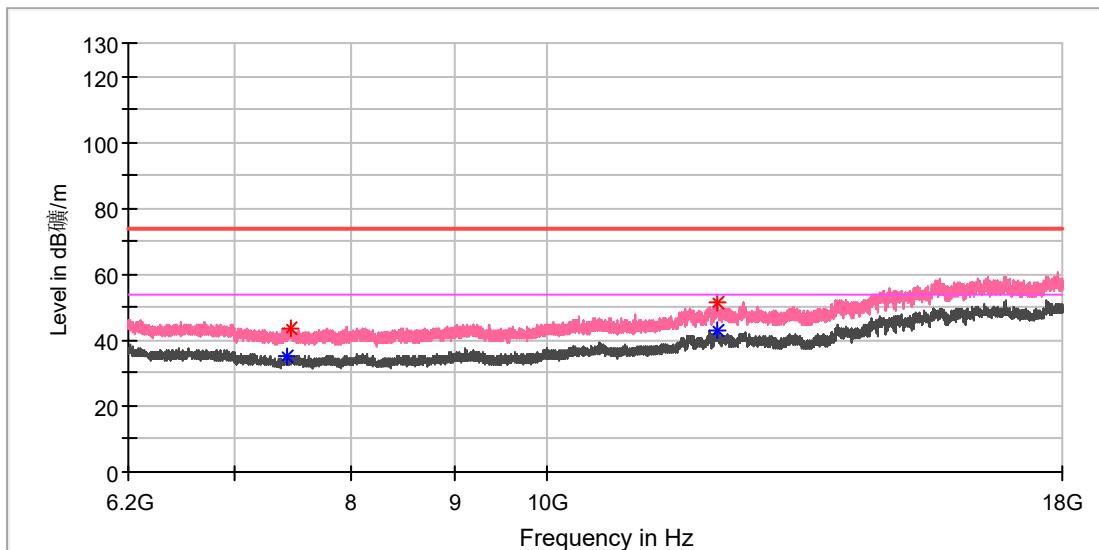
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

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Test report no.

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EUT Information

EUT Name: WisGate Edge Prime
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Test Voltage:: Adaptor
Remark: Temp 24 Humi:50%
Test Standard: FCC Part 15C
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7435.066667	---	35.26	54.00	18.74	150.0	V	45.0	8.4
7467.516667	43.65	---	74.00	30.35	150.0	V	190.0	8.6
12150.641667	---	43.21	54.00	10.79	150.0	V	66.0	16.7
12154.083333	51.21	---	74.00	22.79	150.0	V	344.0	16.5

Final Result

Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

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5.2 Conducted emissions

RESULT:

Pass

Test Specification

Test standard	: FCC Part 15.207(a) RSS-Gen Clause 8.8
Basic standard	: ANSI C63.10: 2013
Frequency range	: 150KHz - 30MHz
Classification	: Class B
Limit	: FCC Part 15.207(a) 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
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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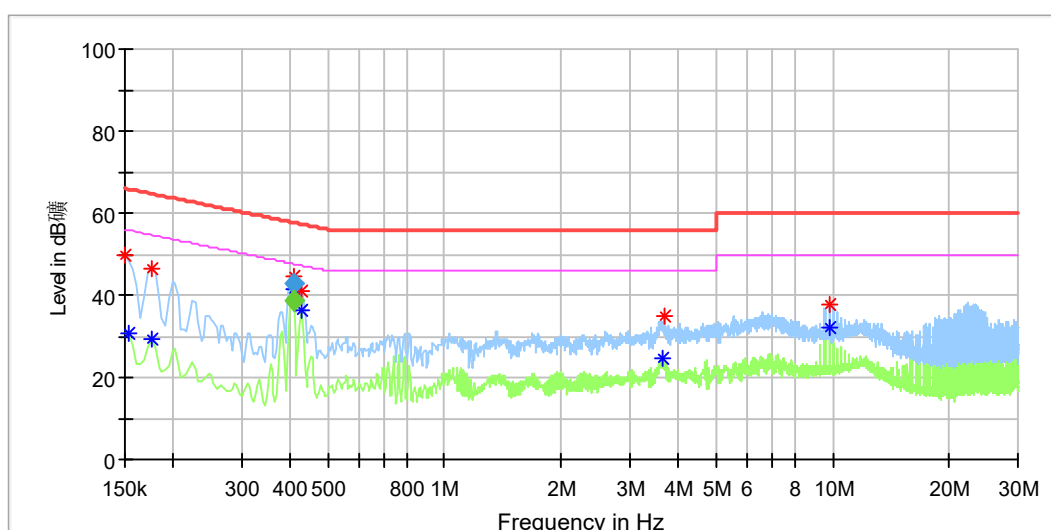
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EUT Information

EUT Name: WisGate Edge Prime
Order Number: 168520158
Model: RAK7240V2
Test Mode: On, WIFI link + Lora link + GNSS link, powered by POE
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	49.90	---	66.00	16.10	L1	9.8
0.153731	---	30.74	55.80	25.06	L1	9.8
0.176119	---	29.46	54.67	25.20	L1	9.8
0.176119	46.68	---	64.67	17.99	L1	9.8
0.407225	---	41.46	47.78	6.32	L1	9.9
0.408225	44.82	---	57.78	12.95	L1	9.9
0.429844	---	36.12	47.26	11.14	L1	9.9
0.429844	40.88	---	57.26	16.38	L1	9.9
3.638719	---	24.58	46.00	21.42	L1	10.1
3.683494	34.78	---	56.00	21.22	L1	10.1
9.799013	---	31.89	50.00	18.11	L1	10.2
9.799013	37.66	---	60.00	22.34	L1	10.2

Final Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.407225	---	38.83	47.71	8.87	1000.0	9.000	L1	9.9
0.408225	42.86	---	57.68	14.82	1000.0	9.000	L1	9.9

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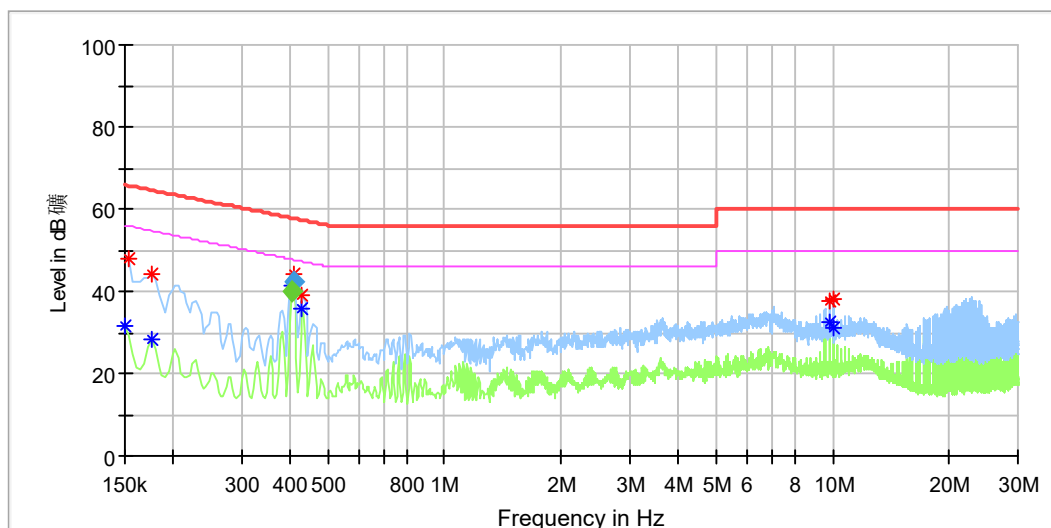
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EUT Information

EUT Name: WisGate Edge Prime
Order Number: 168520158
Model: RAK7240V2
Test Mode: On, WIFI link + Lora link + GNSS link, powered by POE
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	---	31.81	56.00	24.19	N	9.7
0.153731	47.71	---	65.80	18.08	N	9.7
0.176119	---	28.41	54.67	26.26	N	9.7
0.176119	44.07	---	64.67	20.60	N	9.7
0.406456	---	41.17	47.70	6.53	N	9.7
0.410456	44.13	---	57.70	13.57	N	9.7
0.429844	---	35.76	47.26	11.50	N	9.7
0.429844	39.04	---	57.26	18.22	N	9.7
9.799013	---	32.79	50.00	17.21	N	9.9
9.799013	37.64	---	60.00	22.36	N	9.9
10.049006	---	31.03	50.00	18.97	N	9.9
10.049006	38.30	---	60.00	21.70	N	9.9

Final_Result

Frequency (MHz)	QuasiPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Line	Corr. (dB)
0.406456	---	39.77	47.72	7.95	1000.0	9.000	N	9.7
0.410456	42.11	---	57.64	15.53	1000.0	9.000	N	9.7

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