



Spot Check Evaluation

APPLICANT : Rolling Wireless S.à r.l.
EQUIPMENT : RN941W
BRAND NAME : Rolling Wireless
MODEL NAME : RN941W
FCC ID : 2AX2URN941W
STANDARD : 47 CFR Part 2, 22(H), 24(E), 27(L), 27(M), 27(H), 27(F),
27(D), 27(N), 27(O), 27(Q), 90(R), 90(S), 96
TEST DATE(S) : Jan. 21, 2026 ~ Feb. 03, 2026

We, Sporton International Inc. (Shenzhen), would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of Sporton International Inc. (Shenzhen), the test report shall not be reproduced except in full.

Fly Liang

Approved by: Fly Liang



Sporton International Inc. (ShenZhen)

1/F, 2/F, Bldg 5, Shiling Industrial Zone, Xinwei Village, Xili, Nanshan, Shenzhen, 518055

People's Republic of China



TABLE OF CONTENTS

REVISION HISTORY.....	3
1 GENERAL DESCRIPTION.....	4
1.1 Applicant.....	4
1.2 Manufacturer.....	4
1.3 Product Feature of Equipment Under Test.....	4
1.4 Modification of EUT	4
1.5 Testing Site.....	4
1.6 Test Software.....	5
1.7 Applicable Standards.....	5
2 RE-USE OF MEASURED DATA.....	6
2.1 Introduction Section.....	6
2.2 Model Difference Information	6
2.3 Reference detail Section:	7
2.4 Spot Check Verification Data Section.....	7
3 LIST OF MEASURING EQUIPMENT.....	10
4 MEASUREMENT UNCERTAINTY	11
APPENDIX A. SETUP PHOTOGRAPHS	



REVISION HISTORY

REPORT NO.	VERSION	DESCRIPTION	ISSUED DATE
5D3103-01A	Rev. 01	Initial issue of report	Apr. 07, 2026

Conformity Assessment Condition:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacture who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the section "Measurement Uncertainty"

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.



1 General Description

1.1 Applicant

Rolling Wireless S.à r.l.
8-10 rue Mathias Hardt 1717 Luxembourg

1.2 Manufacturer

Rolling Wireless S.à r.l.
8-10 rue Mathias Hardt 1717 Luxembourg

1.3 Product Feature of Equipment Under Test

Product Feature	
Equipment	RN941W
Brand Name	Rolling Wireless
Model Name	RN941W
FCC ID	2AX2URN941W
IMEI Code	Conducted: 350036990000069 Radiation: 350036990000077
EUT Stage	Identical Prototype

Remark: The above EUT's information was declared by manufacturer. Please refer to the specifications or user's manual for more detailed description.

1.4 Modification of EUT

No modifications are made to the EUT during all test items.

1.5 Testing Site

Sporton International Inc. (ShenZhen) is accredited to ISO/IEC 17025:2017 by American Association for Laboratory Accreditation with Certificate Number 5145.01.

Test Firm	Sporton International Inc. (ShenZhen)		
Test Site Location	101, 1st Floor, Block B, Building 1, No. 2, Tengfeng 4th Road, Fenghuang Community, Fuyong Street, Baoan District, Shenzhen City, Guangdong Province 518103 People's Republic of China TEL: +86-755-86066985		
Test Site No.	Sporton Site No.	FCC Designation No.	FCC Test Firm Registration No.
	TH01-SZ 03CH02-SZ	CN1256	421272



1.6 Test Software

Item	Site	Manufacturer	Name	Version
1.	03CH02-SZ	AUDIX	E3	6.2009-8-24a

1.7 Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

- ♦ FCC KDB 484596 D01 Referencing Test Data v03
- ♦ 47 CFR Part 2, 22(H), 24(E), 27(L), 27(M), 27(H), 27(F), 27(D), 27(N), 27(O), 27(Q), 90(R), 90(S), 96
- ♦ ANSI C63.26-2015



2 Re-use of Measured Data

2.1 Introduction Section

This application re-uses data collected on a similar device. The subject device of this application (Model: RN941W, FCC ID: 2AX2URN941W) is electrically identical to the reference device (Model: RN941R, FCC ID: 2AX2URN941R) for the portions of the circuitry corresponding to the data being re-used, following the FCC KDB 484596 D01 Referencing Test Data v03.

ECR Data Referencing Inquiry has been approved by TCB, and the data referencing and spot check test plan includes RF/EMC, the details are presented in section 2.3 of this report, and for SAR Reference detail, please refer to SAR report FA5D3103-01.

The criteria set in section 3 of KDB 484596 D01 v03 is followed to determine whether the data referencing is justified.

The applicant takes full responsibility that the test data as referenced in this report represent compliance for this FCC ID: 2AX2URN941W .

2.2 Model Difference Information

The **main** difference between FCC ID: 2AX2URN941R and FCC ID: 2AX2URN941W is as below:

- Remove ENDC Combo via hardware and software : DC_25A_n41A/ DC_2A_n38A/ DC_2A_n41A/ DC_4A_n38A/ DC_4A_n41A/ DC_66A_n38A/ DC_66A_n41A.
- Remove UL NR CA via hardware and software: CA_n41A-n66A/ CA_n25A-n41A/ CA_n2A-n41A/ CA_n25A-n38A

Other differences and all the details of similarity and difference can be found in the confidential documents (2AX2URN941W_Data Reference).



2.3 Reference detail Section:

Rule Part	Equipment Class	Frequency Band (MHz)	Reference FCC ID (Parent)	Reference on test	Reference Title	FCC ID Filling (Variant)	Test on the variant	Data Referencing (Y/N)
22, 24, 27, 90, 96,	PCB (GSM)	GSM 850/1900	2AX2URN941R	Full test	FG5D3103A	2AX2URN941W	Spot check	Y, All test items
	PCB (WCDMA)	Band II, IV, V	2AX2URN941R	Full test	FG5D3103A	2AX2URN941W	Spot check	Y, All test items
	PCB (LTE)	B2/4/5/7/12/13/14/17/25/26/38/40/41/42/66/71	2AX2URN941R	Full test	FG5D3103B FG5D3103C FG5D3103D FG5D3103E FG5D3103F FG5D3103G FG5D3103H	2AX2URN941W	Spot check	Y, All test items
	CBE (LTE)	B42,42C/48,48B,48C (Part96)	2AX2URN941R	Full test	FG5D3103I FG5D3103J	2AX2URN941W	Spot check	Y, All test items
	PCB (NR)	n2/5/7/12/13/14/25/26/38/40/41/66/71/77/78	2AX2URN941R	Full test	FG5D3103O	2AX2URN941W	Spot check	Y, All test items
	CBE (NR)	n48 (Part96)	2AX2URN941R	Full test	FG5D3103P FG5D3103Q	2AX2URN941W	Spot check	Y, All test items

Y: Pointer to spot-check exhibit; N: Pointer to full test exhibit

2.4 Spot Check Verification Data Section

All test items test against the variant model based on the worst-case condition from the original model was performed in this filing to demonstrate the test data from original model remains representative for the variant model.

All test procedures follow the related section of parent report.

Spot-check measurements, while being always compliant with the applicable rule part(s) for the test under consideration, show a deviation d_{dB} from the reference data no larger than 3 dB:

$$d_{dB} = |V_{dB} - R_{dB}| \leq 3 \text{ dB} \quad (1)$$

V_{dB} , the variant spot-check level

R_{dB} , the corresponding measurement level for the reference model

An alternative to the limit of eq. (1) is available, and is based on considering how far the reference data R_{dB} is from the compliance threshold C_{dB} (also expressed in dB), for the particular test under consideration. In this case, if $M_{dB} = |C_{dB} - R_{dB}|$ is the margin in dB from the compliance limit, a spot check may be considered acceptable when the deviation d_{dB} from the reference data satisfies the following condition:

$$d_{dB} = |V_{dB} - R_{dB}| \leq (3 + M_{dB}/20) \text{ dB}, \text{ for } 0 \leq M_{dB} \leq 60 \text{ dB} \quad (2)$$

$$d_{dB} = |V_{dB} - R_{dB}| = 6 \text{ dB}, \text{ for } M_{dB} > 60 \text{ dB}$$

where “| |” is the absolute value of the measured quantity.

When using the option in eq. (2), d_{dB} increases linearly from 3 dB to 6 dB.



Summary for spot check for each rule entry and technology is listed as below:

Test Item	Mode	2AX2URN941R Parent Worst mode Test Result	2AX2URN941W Variant Check Test Result	Deviation (dB)	Deviation Limit (dB)
Conducted Power (dBm)	GSM850	32.78	32.53	0.25	3
	GSM1900	29.95	29.72	0.23	3
	WCDMA II	24	23.97	0.03	3
	WCDMA IV	24	23.89	0.11	3
	WCDMA V	23.77	23.73	0.04	3
	LTE Band 2	23.37	23.24	0.13	3
	LTE Band 4	23.25	23.06	0.19	3
	LTE Band 5	23.03	23	0.03	3
	LTE Band 7	23.58	23.36	0.22	3
	LTE Band 12	23.19	23.12	0.07	3
	LTE Band 13	23.06	23.01	0.05	3
	LTE Band 14	23.04	23.02	0.02	3
	LTE Band 17	23.16	23.11	0.05	3
	LTE Band 25	23.36	23.24	0.12	3
	LTE Band 26	22.98	22.95	0.03	3
	LTE Band 66	23.38	23.06	0.32	3
	LTE Band 71	23.54	23.27	0.27	3
	LTE Band 38	23.64	23.49	0.15	3
	LTE Band 40	11.04	10.22	0.82	3
	LTE Band 41 PC3	23.66	23.54	0.12	3
	LTE Band 41 PC2	25.71	25.54	0.17	3
	LTE Band 42	23.34	23.32	0.02	3
	LTE Band 48	24.49	23.1	1.39	3
	N2	24.22	23.15	1.07	3
	N25	24.29	23.24	1.05	3
	N7	24.41	23.74	0.67	3
	N66	24.22	23.4	0.82	3
	N12	23.64	23.47	0.17	3
	N13	23.4	23.29	0.11	3
	N14	23.28	23.17	0.11	3
	N5	23.72	23.25	0.47	3
	N26-90S	23.81	23.13	0.68	3
	N26-22H	23.89	23.28	0.61	3
	N71	24.15	23.18	0.97	3
	N40	18.12	18.02	0.10	3
	N38	24.69	23.55	1.14	3
	N41	26.48	26.11	0.37	3
	N48	24.05	23.31	0.74	3
	N77(27O)	26.85	25.64	1.21	3
	N78(27O)	25.93	25.51	0.42	3
	N77(27Q)	26.09	25.68	0.41	3
	N78(27Q)	25.92	25.63	0.29	3
	MIMO N77(27O)	25.66	25.25	0.41	3
	MIMO N78(27O)	25.43	25.04	0.39	3
	MIMO N77(27Q)	25.66	25.41	0.25	3
	MIMO N78(27Q)	25.53	25.39	0.14	3



Test Item	Mode	2AX2URN941R Parent Worst mode Test Result	2AX2URN941W Variant Check Test Result	Deviation (dB)	Deviation Limit (dB)
Radiated Spurious Emission(dBm)	GSM850	-55.02	-56.20	1.18	3
	WCDMA IV	-55.94	-55.91	0.03	3
	LTE Band 48	-46.96	-48.41	1.45	3
	5G n40	-43.44	-45.18	1.74	3

Conclusion:

All test items test against the variant model based on the worst-case condition from the original model was performed in this filing to demonstrate the test data from original model remains representative for the variant model.

Based on the spot check test result, the test data from the original model is representative for the variant model. All spot check test data are shown within expected level compliant to limit line.

We are using power measurements from the original parent model reports to list on the grant.

We confirm that the test data referencing policy of FCC KDB 484596 D01 Referencing Test Data v03 has been followed and the test data as referenced from the parent model report represents compliance with new FCC ID.



3 List of Measuring Equipment

Instrument	Manufacturer	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Spectrum Analyzer	R&S	FSV40	101078	10Hz~40GHz	Apr. 02, 2025	Jan. 21, 2026	Apr. 01, 2026	Conducted (TH01-SZ)
DC Power Supply	TTI	PL330P	290070	Max 32V, 3A	Oct. 13, 2025	Jan. 21, 2026	Oct. 12, 2026	Conducted (TH01-SZ)
Power Divider	Titan	P02N005180	923402	0.4GHz~26.5GHz	Nov. 07, 2025	Jan. 21, 2026	Nov. 06, 2026	Conducted (TH01-SZ)
Thermal Chamber	Ten Billion Hongzhangroup	LP-150U	H2014081803	-40~+150°C	Jul. 02, 2025	Jan. 21, 2026	Jul. 01, 2026	Conducted (TH01-SZ)
EXA Spectrum Analyzer	KEYSIGHT	N9010A	MY55150213	10Hz~44GHz	Jul. 03, 2025	Feb. 03, 2026	Jul. 02, 2026	Radiation (03CH02-SZ)
Loop Antenna	R&S	HFH2-Z2E	101141	9kHz~30MHz	Dec. 25, 2025	Feb. 03, 2026	Dec. 24, 2026	Radiation (03CH02-SZ)
Bilog Antenna	TeseQ	CBL6112D	35407	30MHz-2GHz	Dec. 23, 2025	Feb. 03, 2026	Dec. 22, 2027	Radiation (03CH02-SZ)
Double Ridge Horn Antenna	ETS-Lindgren	3117	00119436	1GHz~18GHz	Jul. 04, 2025	Feb. 03, 2026	Jul. 03, 2026	Radiation (03CH02-SZ)
HF Amplifier	MITEQ	TTA1840-35-HG	1871923	18GHz~40GHz	Jul. 03, 2025	Feb. 03, 2026	Jul. 02, 2026	Radiation (03CH02-SZ)
SHF-EHF Horn	com-power	AH-840	101071	18Ghz-40GHz	Apr. 03, 2025	Feb. 03, 2026	Apr. 02, 2027	Radiation (03CH02-SZ)
LF Amplifier	EM Electronics	EM330	060788	20MHz-3GHz	Dec. 25, 2025	Feb. 03, 2026	Dec. 24, 2026	Radiation (03CH02-SZ)
HF Amplifier	KEYSIGHT	83017A	MY53270105	0.5GHz~26.5Ghz	Oct. 13, 2025	Feb. 03, 2026	Oct. 12, 2026	Radiation (03CH02-SZ)
AC Power Source	Chroma	61601	616010003043	N/A	Oct. 13, 2025	Feb. 03, 2026	Oct. 12, 2026	Radiation (03CH02-SZ)
Turn Table	Chaintek	T-200	N/A	0~360 degree	NCR	Feb. 03, 2026	NCR	Radiation (03CH02-SZ)
Antenna Mast	Chaintek	MBS-400	N/A	1 m~4 m	NCR	Feb. 03, 2026	NCR	Radiation (03CH02-SZ)

NCR: No Calibration Required.

4 Measurement Uncertainty

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI 63.26-2015. All the measurement uncertainty value were shown with a coverage K=2 to indicate 95% level of confidence. The measurement data show herein meets or exceeds the CISPR measurement uncertainty values specified in CISPR 16-4-2 and can be compared directly to specified limit to determine compliance.

Uncertainty of Conducted Measurement

Test Item	Uncertainty
Conducted Power	± 1.34 dB

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	2.47 dB
--	---------

Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	3.31 dB
--	---------

Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	3.72 dB
--	---------

-THE END-