

TEST REPORT

Applicant: Ningbo Zlink Technology Co., Ltd.
Address: No.1, Song Cui Road, Dongqian Lake Tourism
Resort, Ningbo, Zhejiang, China
Equipment Type: ultrasonic water meter
Model Name: LXC (refer to section 2.3)
Brand Name: ZLINK
FCC ID: 2BWPU-ZLNB
Test Standard: 47 CFR Part 2.1091
KDB 447498 D04 v01
Sample Arrival Date: Jun. 16, 2026
Test Date: Jul. 03, 2026
Date of Issue: Jul. 10, 2026

ISSUED BY:

Shenzhen BALUN Technology Co., Ltd.



Tested by: Xiong Lining

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(Technical Director)

Xiong Lining

Xu Rui

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Revision History

<u>Version</u>	<u>Issue Date</u>	<u>Revisions Content</u>
<u>Rev. 01</u>	<u>Jul. 10, 2026</u>	<u>Initial Issue</u>

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1 GENERAL INFORMATION

1.1 Test Laboratory

Name	Shenzhen BALUN Technology Co., Ltd.
Address	601, Building 2, Intelligent Connected Vehicle Industrial Park, No.55, Xiangshan Road, Luotian Community, Yanluo Sub-district, Bao'an District, Shenzhen
Phone Number	+86 755 6685 0100

1.2 Test Location

Name	Shenzhen BALUN Technology Co., Ltd.
Location	☐ Building 2, Intelligent Connected Vehicle Industrial Park, No.55, Xiangshan Road, Luotian Community, Yanluo Sub-district, Bao'an District, Shenzhen, Guangdong
	☒ 1/F., Building B, Ganghongji High-Tech Intelligent Industrial Park, No.1008, Songbai Road, Yangguang Community, Xili Subdistrict, Nanshan District, Shenzhen, Guangdong
Accreditation Certificate	The laboratory is a testing organization accredited by FCC as a accredited testing laboratory. The designation number is CN1196.

2 PRODUCT INFORMATION

2.1 Applicant Information

Applicant	Ningbo Zlink Technology Co., Ltd.
Address	No.1, Song Cui Road, Dongqian Lake Tourism Resort, Ningbo, Zhejiang, China

2.2 Manufacturer Information

Manufacturer	Ningbo Zlink Technology Co., Ltd.
Address	No.1, Song Cui Road, Dongqian Lake Tourism Resort, Ningbo, Zhejiang, China

2.3 General Description for Equipment under Test (EUT)

EUT Name	ultrasonic water meter
Model Name Under Test	LXC
Series Model Name	LXC-DN15, LXC-DN20, LXC-DN25
Description of Model name differentiation	All models are same with electrical parameters and internal circuit structure, The only differences are the diameter and length of the connecting pipes, which are all made of plastic tubing. All other components remain the same. (this information provided by the applicant)
Hardware Version	PHXW211.R112-0V01-F-BC660-20250929
Software Version	4.37.03.04.46
Dimensions (Approx.)	N/A
Weight (Approx.)	N/A

2.4 Technical Information

Network and Wireless connectivity	NB-IOT B2
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The requirement for the following technical information of the EUT was tested in this report:

Operating Mode	NB-IOT B2		
Frequency Range	NB-IoT B2	TX: 1850 ~ 1910 MHz	RX: 1930 ~ 1990 MHz
Antenna Type	NB-IoT B2	PIFA Antenna	
Exposure Category	General Population/Uncontrolled Exposure		
Product Type	Mobile Device		

3 SUMMARY OF TEST RESULT

3.1 Test Standards

No.	Identity	Document Title
1	KDB 447498 D04 v01	447498 D04 Interim General RF Exposure Guidance v01

3.2 Limit Standards

No.	Identity	Document Title
1	47 CFR Part 2.1091	Radiofrequency radiation exposure evaluation: mobile devices

4 DEVICE CATEGORY AND LEVELS LIMITS

Mobile Devices:

CFR Title 47 §2.1091(b)

For purposes of this section, a mobile device is defined as a transmitting device designed to be used in other than fixed locations and to generally be used in such a way that a separation distance of at least 20 centimeters is normally maintained between the transmitter's radiating structure(s) and the body of the user or nearby persons.

FCC KDB 447498 D04 General RF Exposure Guidance v01 Limit

Evaluation of compliance with the exposure limits in § 1.1310 is necessary if the ERP of the device is greater than ERP_{20cm} in Formula (B.1) [repeated from § 2.1091(c)(1) and § 1.1307(b)(1)(i)(B)].

$$P_{th} \text{ (mW)} = ERP_{20 \text{ cm}} \text{ (mW)} = \begin{cases} 2040f & 0.3 \text{ GHz} \leq f < 1.5 \text{ GHz} \\ 3060 & 1.5 \text{ GHz} \leq f \leq 6 \text{ GHz} \end{cases} \quad (\text{B.1})$$

If the ERP is not easily obtained, then the available maximum time-averaged power may be used (i. e., without consideration of ERP only if the physical dimensions of the radiating structure(s) do not exceed the electrical length of $\lambda/4$ or if the antenna gain is less than that of a half-wave dipole.

SAR-based exemptions are constant at separation distances between 20 cm and 40 cm to avoid discontinuities in the threshold when transitioning between SAR-based and MPE-based exemption criteria at 40 cm, considering the importance of reflections.

The SAR-based exemption formula of § 1.1307(b)(3)(i)(B), repeated here as Formula (B.2), applies for single fixed, mobile, and portable RF sources with available maximum time-averaged power or effective radiated power (ERP), whichever is greater, of less than or equal to the threshold P_{th} (mW).

This method shall only be used at separation distances from 0.5 cm to 40 cm and at frequencies from 0.3 GHz to 6 GHz (inclusive). P_{th} is given by Formula (B.2).

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases} \quad (\text{B. 2})$$

where

$$x = -\log_{10} \left(\frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right)$$

and f is in GHz, d is the separation distance (cm), and $ERP_{20 \text{ cm}}$ is per Formula (B.1).
The example values shown in Table B.2 are for illustration only.

Table B.2—Example Power Thresholds (mW)

Frequency (MHz)	Distance (mm)										
		5	10	15	20	25	30	35	40	45	50
300		39	65	88	110	129	148	166	184	201	217
450		22	44	67	89	112	135	158	180	203	226
835		9	25	44	66	90	116	145	175	207	240
1900		3	12	26	44	66	92	122	157	195	236
2450		3	10	22	38	59	83	111	143	179	219
3600		2	8	18	32	49	71	96	125	158	195
5800		1	6	14	25	40	58	80	106	136	169

5 ASSESSMENT RESULT

5.1 Output Power

Mode	Bluetooth
Conducted Power (dBm)	19.78
Antenna Gain (dBi)	0.50
EIRP (dBm)	20.28
Note: This report listed the worst case conducted power value, please refer to Ti-EE26060596-501 report for more details.	

5.2 Tune-up power

Mode	Conducted Power Range (dBm)	EIRP Range (dBm)	ERP Range (dBm)
NB-IOT B2	[18.00, 20.00]	[18.50, 20.50]	[16.35, 18.35]
Note1: ERP= EIRP -2.15dB. Note2: According KDB 447498 D04, used the greater of maximum conducted power and ERP to compare with the threshold value Pth.			

5.3 RF Exposure Evaluation Result

Evolution Mode	Maximum Power (dBm)	Maximum Power (mw)	Distance (mm)	Threshold Power (mW)	Verdict
Bluetooth	20.00	100.00	200	3060.00	Pass

5.4 Conclusion

This EUT is deemed to comply with the reference level limits, therefore the basic restrictions are compliant with human exposure limits.

Statement

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--END OF REPORT--