

TEST REPORT

Report Reference No.....: MTEB24080068-H

FCC ID.....: 2ASYP-LDMTX

Compiled by

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Date of issue.....: August 06,2024

Representative Laboratory Name.: Shenzhen Most Technology Service Co., Ltd.

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Nanshan, Shenzhen, Guangdong, China.

Applicant's name.....: NINGBO LIANDA WINCH CO.,LTD

Address.....: Yushantou Village,Dongqiao Town,Haishu Dist,Ningbo,China

Test specification/ Standard.....: 47 CFR Part 1.1307

47 CFR Part 2.1093

TRF Originator.....: Shenzhen Most Technology Service Co., Ltd.

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Test item description.....: Wireless remote

Trade Mark.....: N/A

Model/Type reference.....: LD-MTX-315

Listed Models N/A

Modulation Type.....: ASK

Operation Frequency.....: 315MHz

Hardware version.....: V1.1

Software version V1.1

Rating.....: DC 3V by Battery

Result.....: PASS

TEST REPORT

Equipment under Test : Wireless remote

Model /Type : LD-MTX-315

Listed Models : N/A

Remark : N/A

Applicant : NINGBO LIANDA WINCH CO.,LTD

Address : Yushantou Village,Dongqiao Town,Haishu Dist,Ningbo,China

Manufacturer : NINGBO LIANDA WINCH CO.,LTD

Address : Yushantou Village,Dongqiao Town,Haishu Dist,Ningbo,China

Test Result:	PASS
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The test report merely corresponds to the test sample.

It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

Contents

1. Revision History

Revision	Issue Date	Revisions	Revised By
00	2024.08.05	Initial Issue	Alisa Luo

2.1 RF Exposure Compliance Requirement

2.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06

4.3.1. Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

2.1.2 Limits

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$$\left[\frac{\text{max. power of channel, including tune-up tolerance, mW}}{(\text{min. test separation distance, mm})} \right] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0 \text{ for 1-g SAR and } \leq 7.5 \text{ for 10-g extremity SAR, where}$$
$$f(\text{GHz}) \text{ is the RF channel transmit frequency in GHz}$$

Power and distance are rounded to the nearest mW and mm before calculation¹⁷

The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion

2.1.3 EUT RF Exposure

$$\text{EIRP} = \text{PT} * \text{GT} = (\text{E} \times \text{D})^2 / 30$$

where:

PT = transmitter output power in watts,

GT = numeric gain of the transmitting antenna (unitless),

E = electric field strength in V/m, $10^{(\text{dB}\mu\text{V}/\text{m})/20} / 10^6$,

D = measurement distance in meters (m)---3m,

$$\text{So PT} = (\text{E} \times \text{D})^2 / 30 / \text{GT}$$

The worst case (refer to report MTEB24080068-R) is below:

Antenna polarization: Horizontal		
Frequency (MHz)	Level (dBuV/m)	Polarization
315	70.91	Peak
315	57.90	Average

Antenna polarization: Vertical		
Frequency (MHz)	Level (dBuV/m)	Polarization
315	67.10	Peak
315	43.88	Average

For 315MHz wireless:

Field strength=70.91dBuV/m

Ant gain 0dBi;so Ant numeric gain=1

$$\text{EIRP} = \text{PT} * \text{GT} = (\text{E} \times \text{D})^2 / 30 = (10^{(\text{dB}\mu\text{V}/\text{m})/20} / 10^6 * 3)^2 / 30 = 0.0000033$$

$$\text{So PT} = \text{EIRP} / \text{GT} = 0.0000033 \text{ W} = 0.0033 \text{ mW}$$

$$\text{So } (0.0033 \text{ mW} / 5 \text{ mm}) * \sqrt{0.315 \text{ GHz}} = 0.00037$$

$$\text{exclusion} = 0.00037 < 3.0 \text{ for 1-g SAR}$$

So the SAR report is not required.