



RF Exposure Evaluation For

Lumistar (Shanghai) Robotics Technology Co., Ltd.

H1 Wristband Controller

Test Model: HYWW001

Prepared for : Lumistar (Shanghai) Robotics Technology Co., Ltd.
Address : Room 340, Building 1, No. 299 Zhongchen Road, Songjiang District, Shanghai

Prepared by : Shenzhen LCS Compliance Testing Laboratory Ltd.
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Date of receipt of test sample : December 26, 2025
Number of tested samples : 2
Sample No. : A251222145-1, A251222145-2
Serial number : Prototype
Date of Test : December 26, 2025 ~ January 28, 2026
Date of Report : January 29, 2026



**RF Exposure Evaluation****Report Reference No.** : **LCSA12225088EC****Date of Issue**..... : January 29, 2026**Testing Laboratory Name**..... : **Shenzhen LCS Compliance Testing Laboratory Ltd.****Address**..... : 101, 201 Bldg A & 301 Bldg C, Juji Industrial Park Yabianxueziwei, Shajing Street, Baoan District, Shenzhen, 518000, China**Testing Location Procedure**..... : Full application of Harmonised standards ☒
Partial application of Harmonised standards ☐
Other standard testing method ☐**Applicant's Name**..... : **Lumistar (Shanghai) Robotics Technology Co., Ltd.****Address**..... : Room 340, Building 1, No. 299 Zhongchen Road, Songjiang District, Shanghai**Test Specification****Standard**..... : FCC CFR 47 part1 1.1310
FCC CFR 47 part1 1.1307
FCC CFR 47 part2 2.1093
KDB447498 D04 Interim General RF Exposure Guidance v01**Test Report Form No.**..... : TRF-4-E-215 A0**TRF Originator**..... : Shenzhen LCS Compliance Testing Laboratory Ltd.**Master TRF**..... : Dated 2011-03**Shenzhen LCS Compliance Testing Laboratory Ltd. All rights reserved.**

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EUT Description..... : **H1 Wristband Controller****Trade Mark**..... : LUMISTAR**Test Model**..... : HYWW001**Ratings**..... : Please Refer to Page 6**Result** : **PASS****Compiled by:**

Diamond Lu/ Administrators

Supervised by:

Kevin Huang/ RF Manager

Approved by:

Gavin Liang/ Manager



**FCC -- TEST REPORT**

Test Report No. :	LCSA12225088EC	<u>January 29, 2026</u> Date of issue
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Test Model.....	: HYWW001
EUT.....	: H1 Wristband Controller
Applicant.....	: Lumistar (Shanghai) Robotics Technology Co., Ltd.
Address.....	: Room 340, Building 1, No. 299 Zhongchen Road, Songjiang District, Shanghai
Telephone.....	: /
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	:
Manufacturer.....	: Lumistar (Shanghai) Robotics Technology Co., Ltd.
Address.....	: Room 340, Building 1, No. 299 Zhongchen Road, Songjiang District, Shanghai
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	:
Factory.....	: TENMA PRECISION (SHENZHEN) CO., LTD.
Address.....	: 101, BUILDING D, NO. 2 NIKENG 3RD ROAD, XINLAN COMMUNITY, GUANLAN STREET, LONGHUA DISTRICT, SHENZHENCITY, GUANGDONG PROVINCE, CHINA
Telephone.....	: /
Fax.....	: /

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.





Revision History

Report Version	Issue Date	Revision Content	Revised By
000	January 29, 2026	Initial Issue	--





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1. Product Information

EUT	: H1 Wristband Controller
Test Model	: HYWW001
Ratings	: Input: 5V $\pm$ 1A Max Battery: 3.87V, 225mAh, 0.871Wh
Hardware Version	: V1
Software Version	: V1
Bluetooth	:
Frequency Range	: 2402MHz-2480MHz
Bluetooth Channel Number	: 40 channels for Bluetooth V5.0 (DTS)
Bluetooth Channel Spacing	: 2MHz for Bluetooth V5.0 (DTS)
Bluetooth Modulation Type	: GFSK for Bluetooth V5.0 (DTS)
Bluetooth Version	: V5.0
Antenna Description	: Ceramic Antenna, 3.12dBi(Max.)
UWB	:
Frequency Range	: 7700MHz ~ 8300MHz
Channel Number	: 1
Channel Frequency	: 7978MHz
Modulation Type	: BPM-BPSK
Antenna Description	: Internal Antenna, 0.9dBi(Max.)
Exposure category	: General population/uncontrolled environment
EUT Type	: Production Unit
Device Type	: Portable Device

Note: For a more detailed antenna description, please refer to the antenna specifications or the antenna report provided by the customer.





2. Evaluation method and Limit

As discussed in § 1.1307(b)(3)(ii)(A), For multiple RF sources: Multiple RF sources are exempt if:

(A) The available maximum time-averaged power of each source is no more than 1 mW and there is a separation distance of two centimeters between any portion of a radiating structure operating and the nearest portion of any other radiating structure in the same device, except if the sum of multiple sources is less than 1 mW during the time-averaging period, in which case they may be treated as a single source (separation is not required). This exemption may not be used in conjunction with other exemption criteria other than those in paragraph (b)(3)(i)(A) of this section. Medical implant devices may only use this exemption and that in paragraph (b)(3)(i)(A).

(B) in the case of fixed RF sources operating in the same time-averaging period, or of multiple mobile or portable RF sources within a device operating in the same time averaging period, if the sum of the fractional contributions to the applicable thresholds is less than or equal to 1 as indicated in the following equation.

$$\sum_{i=1}^a \frac{P_i}{P_{th,i}} + \sum_{j=1}^b \frac{ERP_j}{ERP_{th,j}} + \sum_{k=1}^c \frac{Evaluated_k}{Exposure Limit_k} \leq 1$$

Where:

a = number of fixed, mobile, or portable RF sources claiming exemption using paragraph (b)(3)(i)(B) of this section for P_{th} , including existing exempt transmitters and those being added.

b = number of fixed, mobile, or portable RF sources claiming exemption using paragraph (b)(3)(i)(C) of this section for Threshold ERP, including existing exempt transmitters and those being added.

c = number of existing fixed, mobile, or portable RF sources with known evaluation for the specified minimum distance including existing evaluated transmitters.

P_i = the available maximum time-averaged power or the ERP, whichever is greater, for fixed, mobile, or portable RF source i at a distance between 0.5 cm and 40 cm (inclusive).

$P_{th,i}$ = the exemption threshold power (P_{th}) according to paragraph (b)(3)(i)(B) of this section for fixed, mobile, or portable RF source i .

ERP_j = the ERP of fixed, mobile, or portable RF source j .

$ERP_{th,j}$ = exemption threshold ERP for fixed, mobile, or portable RF source j , at a distance of at least $\lambda/2\pi$ according to the applicable formula of paragraph (b)(3)(i)(C) of this section.

$Evaluated_k$ = the maximum reported SAR or MPE of fixed, mobile, or portable RF source k either in the device or at the transmitter site from an existing evaluation at the location of exposure.

$Exposure Limit_k$ = either the general population/uncontrolled maximum permissible exposure (MPE) or specific absorption rate (SAR) limit for each fixed, mobile, or portable RF source k , as applicable from § 1.1310 of this chapter.





3. Evaluation Results

< BLE 1M >

Mode	Channel	Frequency (MHz)	Peak Conducted Output Power (dBm)	Peak Conducted Output Power (mW)	Limit(mW)	Ratio
GFSK	0	2402	-0.56	0.8790	1.00	0.8790
	19	2440	-0.80	0.8318	1.00	0.8318
	39	2480	-2.50	0.5623	1.00	0.5623

< BLE 2M >

Mode	Channel	Frequency (MHz)	Peak Conducted Output Power (dBm)	Peak Conducted Output Power (mW)	Limit (mW)	Ratio
GFSK	0	2402	-0.50	0.8913	1.00	0.8913
	19	2440	-0.99	0.7962	1.00	0.7962
	39	2480	-2.47	0.5662	1.00	0.5662

< UWB >

Mode	Frequency (MHz)	Power (dBm)	Average Power(mW)	Limit(mW)	Ratio
BPM-BPSK	7700-8300	-15.89	0.0260	1.00	0.026

Simultaneous Transmission Evaluation

in the case of fixed RF sources operating in the same time-averaging period, or of multiple mobile or portable RF sources within a device operating in the same time averaging period, if the sum of the fractional contributions to the applicable thresholds is less than or equal to 1 as indicated in the following equation.

Mode	Ratio	Limit
Bluetooth LE	0.8913	/
UWB	0.0260	/
Total Ratio	0.9173	1.0

4. Conclusion

The available maximum time-averaged power of each source is no more than 1 mW and the sum of the fractional contributions to the applicable thresholds is less than 1, Therefore, this EUT is Compliance with RF Exposure compliance.





5. Description of Test Facility

NVLAP Accreditation Code is 600167-0.
FCC Designation Number is CN5024.
CAB identifier is CN0071.
CNAS Registration Number is L4595.
Test Firm Registration Number: 254912.

6. Measurement Uncertainty

BLE/UWB:

Test Item		Frequency Range	Uncertainty	Note
Output power	:	1GHz-40GHz	±0.57dB	(1)

(1). This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

.....THE END OF REPORT.....

