

# FCC SAR REPORT

**Applicant:** Move Robotics Technology Co., Ltd.

**Address of Applicant:** Floor 4, No.1150, Feidu Road, Xin Cheng town, Nanhui, Pudong, Shanghai, China

**Equipment Under Test (EUT)**

Product Name: Health Management Exoskeleton

Model No.: Mercury-Sports-1901

Trade mark Move Robotics

**FCC ID:** 2AVZEMRMCRUS20PT206

**Applicable standards:** FCC 47 CFR Part 2.1093

**Result:** Pass

Authorized Signature:



Bruce Zhang  
Laboratory Manager

This report details the results of the testing carried out on one sample. The results contained in this test report do not relate to other samples of the same product and does not permit the use of the CCIS product certification mark. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

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## 2 Version

| Version No. | Date          | Description           |
|-------------|---------------|-----------------------|
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## 4 General Information

### 4.1 Client Information

|                          |                                                                               |
|--------------------------|-------------------------------------------------------------------------------|
| Applicant:               | Move Robotics Technology Co., Ltd.                                            |
| Address of Applicant:    | Floor 4, No.1150, Feidu Road, Xin Cheng town, Nanhui, Pudong, Shanghai, China |
| Manufacturer:            | Move Robotics Technology Co., Ltd.                                            |
| Address of Manufacturer: | Floor 4, No.1150, Feidu Road, Xin Cheng town, Nanhui, Pudong, Shanghai, China |

### 4.2 General Description of EUT

|                          |                                                                                              |                                                         |
|--------------------------|----------------------------------------------------------------------------------------------|---------------------------------------------------------|
| Product Name:            | Health Management Exoskeleton                                                                |                                                         |
| Model No.:               | Mercury-Sports-1901                                                                          |                                                         |
| Category of device       | Portable device                                                                              |                                                         |
| Operation Frequency:     | 802.11a/n: 5150MHz ~5250MHz, 5725MHz~5850MHz                                                 |                                                         |
| Modulation technology:   | Wi-Fi: 802.11a/n20: OFDM                                                                     |                                                         |
| Antenna Type:            | Internal Antenna                                                                             |                                                         |
| Antenna Gain:            | right ankle: 5.2G WiFi: 2.0dBi; 5.8G WiFi: 3.0dBi                                            |                                                         |
| Dimensions (L*W*H):      | 95 mm (L)× 60 mm (W)× 20 mm (H)                                                              |                                                         |
| Accessories information: | Adapter:<br>Model: AX-ADPD<br>Input: 100-240V ~ 50/60Hz 2.5A<br>USB Output: 5V 3A(each port) | Battery:<br>Rechargeable Li-ion Battery<br>3.7V/1450mAh |

## 5 Conducted RF Output Power

### 5.1 WLAN 5.2GHz Band Conducted Power

| Average Power (dBm) |                 |              |            |
|---------------------|-----------------|--------------|------------|
| Channel             | Frequency (MHz) | 802.11 a     | 802.11 n20 |
| CH 36               | 5180            | 13.54        | 13.44      |
| CH 40               | 5200            | <b>13.62</b> | 13.43      |
| CH 48               | 5240            | 13.49        | 13.25      |

**Note:**

1. Per KDB 248227 D01v02r02, choose the highest output power channel to test SAR and determine further SAR exclusion.
2. The output power of all data rate were pre-scan, just the worst case (the lowest data rate) of all mode were shown in report.
3. Per KDB 248227 D01V02r02 section 2.2, when the EUT in continuously transmitting mode, the actual duty cycle is 99.1%, so the duty cycle factor is 1.01.

### 5.2 WLAN 5.8GHz Band Conducted Power

| Average Power (dBm) |                 |          |              |
|---------------------|-----------------|----------|--------------|
| Channel             | Frequency (MHz) | 802.11 a | 802.11 n20   |
| CH 149              | 5745            | 13.56    | 13.68        |
| CH 157              | 5785            | 13.38    | <b>13.75</b> |
| CH 165              | 5825            | 13.60    | 13.44        |

**Note:**

1. Per KDB 248227 D01v02r02, choose the highest output power channel to test SAR and determine further SAR exclusion.
2. The output power of all data rate were pre-scan, just the worst case (the lowest data rate) of all mode were shown in report.
3. Per KDB 248227 D01V02r02 section 2.2, when the EUT in continuously transmitting mode, the actual duty cycle is 99.1%, so the duty cycle factor is 1.01.

## 6 Exposure Positions Consideration

### 6.1 SAR Test Exclusion Consideration (For Right ankle)

| SAR exclusion calculations for antenna < 50mm from the user |             |                    |       |                                   |                                                              |
|-------------------------------------------------------------|-------------|--------------------|-------|-----------------------------------|--------------------------------------------------------------|
| Antennas                                                    | Freq. (MHz) | Max. tune-up Power |       | Distance of Antennas to user (mm) | Calculated Threshold Value ( $\leq 7.5$ SAR is not required) |
|                                                             |             | dBm                | mW    | Back                              | Back                                                         |
| 5.2GHz 802.11a                                              | 5200        | 14.0               | 25.12 | 15                                | 3.82                                                         |
| 5.8GHz 802.11ac                                             | 5785        | 14.0               | 25.12 | 15                                | 4.06                                                         |

| Test Positions  |                 |
|-----------------|-----------------|
| Antennas        | Back of display |
| 5.2GHz 802.11a  | No              |
| 5.8GHz 802.11ac | No              |

**Note:**

- Per KDB 447498 D01v06, section 4.3.1, the 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq 50$  mm are determined by:  

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 7.5$$
for 10-g SAR, where
  - $f(\text{GHz})$  is the RF channel transmit frequency in GHz
  - Power and distance are rounded to the nearest mW and mm before calculation
  - The result is rounded to one decimal place for comparison
- The back side is the side which closes to the human body.

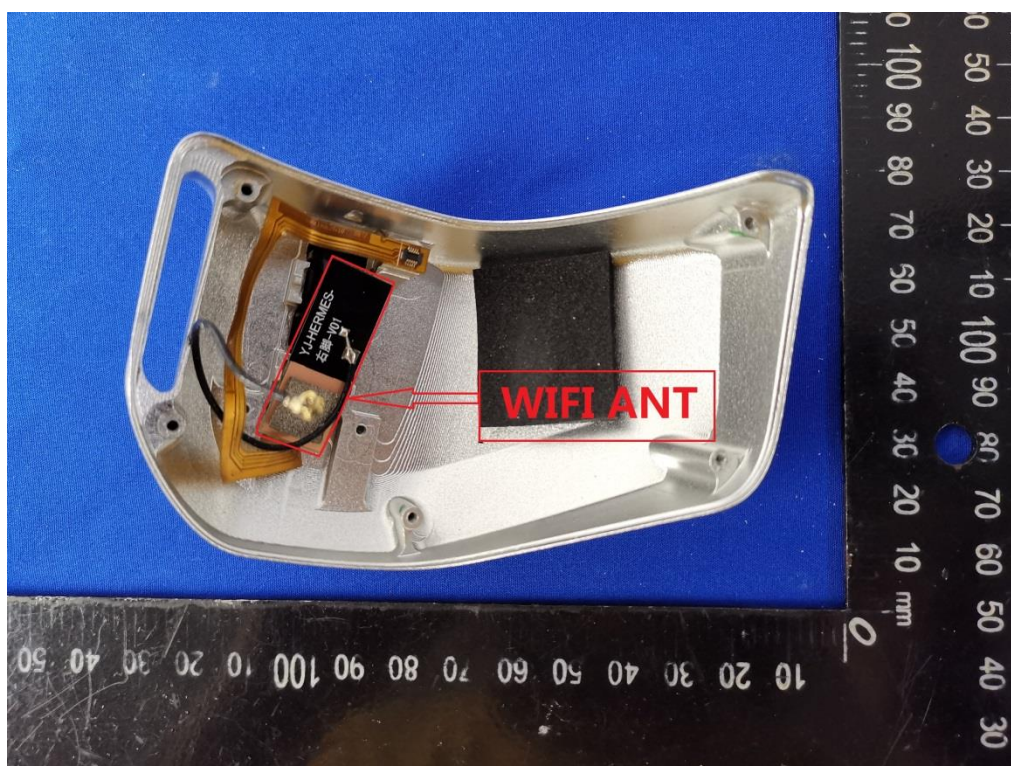
## 7 Conclusion

SAR test for this DUT is exclusion.

## APPENDIX: DUT Photos







-----End of Report-----