

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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20 Aug., 2020

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20 Aug., 2020

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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: Model: AX-ADPD Input: 100-240V ~ 50/60Hz 2.5A USB Output: 5V 3A(each port)	Battery: Rechargeable Li-ion Battery 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	13.62	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	13.75
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 (≤ 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 ≤ 50 mm are determined by:

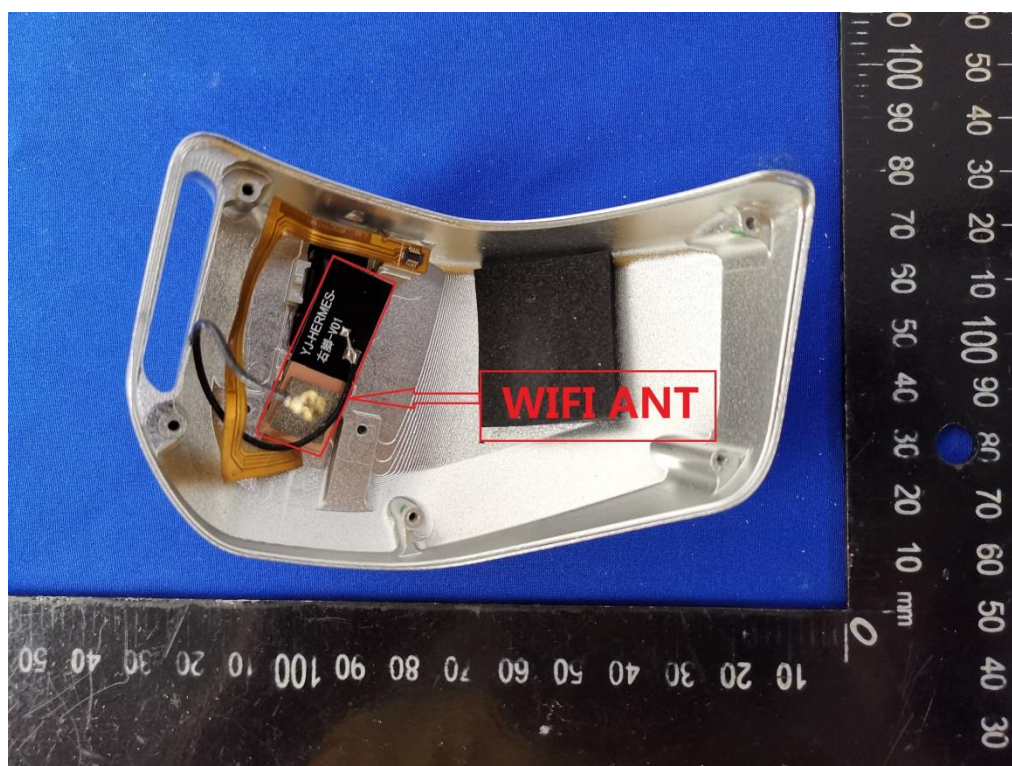
$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 7.5$$
for 10-g SAR, where
 - $f(\text{GHz})$ is the RF channel transmit frequency in GHz
 - Power and distance are rounded to the nearest mW and mm before 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-----