

FCC RF EXPOSURE REPORT

For

Robotic Vacuum Cleaner

MODEL NUMBER: S300RR

FCC ID: 2AN2O-S300RR01

ISED: 23317-S300RR01

HVIN: S300RR-BLM3

REPORT NUMBER: 4790075417-10

ISSUE DATE: September 26, 2021

Prepared for

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Prepared by

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Revision History

Rev.	Issue Date	Revisions	Revised By
V0	09/26/2021	Initial Issue	

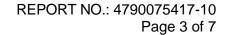




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1. ATTESTATION OF TEST RESULTS

Applicant Information

Company Name: Beijing Roborock Technology Co., Ltd.

Address: Floor 6, Suite 6016, 6017, 6018, Building C, Baosheng Plaza, No.

8 Heiguan Road, Haidian District, 100192 Beijing, China

Manufacturer Information

Company Name: Beijing Roborock Technology Co., Ltd.

Address: Floor 6, Suite 6016, 6017, 6018, Building C, Baosheng Plaza, No.

8 Heiguan Road, Haidian District, 100192 Beijing, China

EUT Information

EUT Name: Robotic Vacuum Cleaner

Model: S300RR Brand: roborock

Sample Received Date: August 24, 2021

Sample Status: Normal Sample ID: 4184798

Date of Tested: August 25, 2021 ~ September 18, 2021

APPLICABLE STANDARDS			
STANDARD	TEST RESULTS		
FCC 47CFR§2.1091	PASS		
KDB-447498 D01 V06	PASS		

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2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 and KDB 447498 D01 General RF Exposure Guidance v06.

3. FACILITIES AND ACCREDITATION

	A2LA (Certificate No.: 4102.01)
	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
	has been assessed and proved to be in compliance with A2LA.
	FCC (FCC Designation No.: CN1187)
	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
	Has been recognized to perform compliance testing on equipment subject
	to the Commission's Delcaration of Conformity (DoC) and Certification
	rules
	ISED (Company No.: 21320)
Accreditation	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
Certificate	has been registered and fully described in a report filed with ISED.
	The Company Number is 21320 and the test lab Conformity Assessment
	Body Identifier (CABID) is CN0046.
	VCCI (Registration No.: G-20019, R-20004, C-20012 and T-20011)
	UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch.
	has been assessed and proved to be in compliance with VCCI, the
	Membership No. is 3793.
	Facility Name:
	Chamber D, the VCCI registration No. is G-20019 and R-20004
	Shielding Room B, the VCCI registration No. is C-20012 and T-20011

Note 1: All tests measurement facilities use to collect the measurement data are located at Building 10, Innovation Technology Park, Song Shan Lake Hi tech Development Zone, Dongguan, 523808, China

Note 2: The test anechoic chamber in UL Verification Services (Guangzhou) Co., Ltd. Song Shan Lake Branch had been calibrated and compared to the open field sites and the test anechoic chamber is shown to be equivalent to or worst case from the open field site.

Note 3: For below 30MHz, lab had performed measurements at test anechoic chamber and comparing to measurements obtained on an open field site. And these measurements below 30MHz had been correlated to measurements performed on an OFS.



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4. REQUIREMENT

LIMIT AND CALCULATION METHOD

Systems operating under the provisions of FCC 47 CFR section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as mobile device whereby a distance of 0.2m normally can be maintained between the user and the device, and below RF Permissible Exposure limit shall comply with. Limits for General Population/Uncontrolled Exposure

RF EXPOSURE LIMIT

Frequency Range (MHz)	E-field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm²)	Averaging Time E ², H ² or S (Minutes)
0.3 1.34	614	1.63	(100)*	30
1.34 30	824/f	2.19/f	(180/f ²)*	30
30 300	27.5	0.073	0.2	30
300 1500			f/1500	30
1500 100,000			1.0	30

CALCULATION METHOD

 $S=PG/4\pi R^2$

Where:

S=power density

P=power input to antenna

G=power gain of the antenna in the direction of interest relative to an isotropic radiator

R=distance to the center of radiation of the antenna



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CALCULATED RESULTS

Radio Frequency Radiation Exposure Evaluation

2.4 GHz WiFi (Worst case) Wireless module: BL-M3881NT1					
Operating Mode	Max. Tune up Power	Max. Directional Antenna Gain	Power density	Limit	
Wode	(dBm)	(dBi)	(mW/ cm ²)		
802.11g	14	2.54	0.00897	1	

Note:

- 1. The calculated distance is 20 cm.
- 2. Therefor the maximum calculations of above situations are less than the "1" limit.

END OF REPORT