FCC TEST REPORT

FCC ID: 2AZRG-2021S7MAX

Product	:	Robotic Vaccum Cleaner
Model Name	:	S7 MAX
Brand	:	SMARTAI
Report No.	:	PTC21061102602E-FC02

Prepared for

ShenZhen Dipusi Electronic Technology Co.LTD

R3-A, No.018, Gaoxin South 7th Road, Yuehai Street, Nanshan, Shenzhen

Prepared by

Precise Testing & Certification Co., Ltd

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TEST RESULT CERTIFICATION

Applicant's name	:	ShenZhen Dipusi Electronic Technology Co.LTD
Address	:	R3-A, No.018, Gaoxin South 7th Road, Yuehai Street, Nanshan, Shenzhen
Manufacture's name	:	ShenZhen Dipusi Electronic Technology Co.LTD
Address	:	R3-A, No.018, Gaoxin South 7th Road, Yuehai Street, Nanshan, Shenzhen
Product name	:	Robotic Vaccum Cleaner
Model name	:	S7 MAX
Test procedure		KDB 447498 D01 General RF Exposure Guidance v06
Test Date	:	Jul. 03, 2021 to Aug. 13, 2021
Date of Issue	:	Aug. 13, 2021
Test Result	:	Pass

This device described above has been tested by PTS, and the test results show that the equipment under test (EUT) is in compliance with the FCC requirements. And it is applicable only to the tested sample identified in the report.

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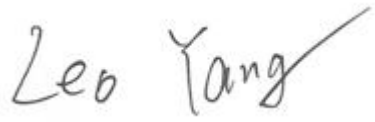
Test Engineer:



Leo Yang / Engineer

Technical Manager:

Chris Du / Manager

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2 Test Summary

Test Items	Test Requirement	Result
Maximum Permissible Exposure (Exposure of Humans to RF Fields)	1.1307(b)(1)	PASS
Remark:		
N/A: Not Applicable		

3 General Information

3.1 General Description of E.U.T.

Product Name	:	Robotic Vaccum Cleaner
Model Name	:	S7 MAX
Additional model		S1,S3,S5,S9
Specification	:	802.11b/g/n HT20
Operation Frequency	:	2412-2462MHz for 802.11b/g;/ n(HT20)
Number of Channel	:	11 channels for 802.11b/g; n(HT20)
Type of Modulation	:	DSSS with DBPSK/DQPSK/CCK for 802.11b; OFDM with BPSK/QPSK/16QAM/64QAM for 802.11g/n;
Antenna installation	:	PCB antenna
Antenna Gain	:	3 dBi
Power supply	:	Adapter model:YJS024W-1901000U Input：AC100-240V 50/60HZ 800mA, DC 19V 1A Adapter model:DBS024A-1901000U Input：AC100-240V 50/60HZ 0.8A, DC 19V 1A Adapter model:YJS015D-1900600U Input：AC120V 60HZ 500mA, DC 19V 600mA Adapter model:GSCU0600S019V12E Input：AC100-240V 50/60HZ 0.5A, DC 19V 0.6A Adapter model:DBS012A-1900600U Input：AC100-240V 50/60HZ 0.35A, DC 19V 0.6A Rated capacity：14.4V 5000mAh Rated capacity：14.4V 2500mAh KA2401A-1901000DE Input: 100-240V ~ 50/60Hz 0.65A Max Output:19.0V DC 1.0A 19.0W
Hardware Version	:	N/A
Software Version	:	N/A

4 RF Exposure

Test Requirement : FCC Part 1.1307(b)(1)

Evaluation Method : FCC Part 2.1091

4.1 Requirements

Systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy levels in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2 m normally can be maintained between the user and the device.

4.2 The procedures / limit

(A) Limits for Occupational / Controlled Exposure

Frequency Range	Electric Field	Magnetic Field	Power Density (S)	Averaging Time
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842 / f	4.89 / f	(900 / f)*	6
30-300	61.4	0.163	1.0	6
300-1500			F/300	6
1500-100,000			5	6

(B) Limits for General Population / Uncontrolled Exposure

Frequency Range	Electric Field	Magnetic Field	Power Density (S)	Averaging Time
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f)*	30
30-300	27.5	0.073	0.2	30
300-1500			F/1500	30
1500-100,000			1.0	30

Note: f = frequency in MHz ; *Plane-wave equivalent power density

4.3 MPE Calculation Method

E (V/m) = $\frac{\sqrt{30 \times P \times G}}{d}$ Power Density: Pd (W/m²) = $\frac{E^2}{377}$

E = Electric field (V/m)

P = Peak RF output power (W)

G = EUT Antenna numeric gain (numeric)

d = Separation distance between radiator and human body (m)

The formula can be changed to

Pd = $\frac{30 \times P \times G}{377 \times d^2}$

From the peak EUT RF output power, the minimum mobile separation distance, d=0.2m, as well as the gain of the used antenna, the RF power density can be obtained

4.4 Test Result

Item	Antenna Gain (numeric)	Max. Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (mW/cm2)	Limit of Power Density (mW/cm2)	Result
WIFI	2.00	20.22	105.20	0.0418	1	Pass

********THE END REPORT********