

Suzhou EUP Electric Co., Ltd.

SAR COMPLIANCE REPORT

Report Type:

FCC SAR assessment report

Model:

VC659D may be followed by one to five characters

SCOUTPLUS may be followed by one to five characters

REPORT NUMBER:

220801610SHA-002

ISSUE DATE:

April 20, 2023

DOCUMENT CONTROL NUMBER:

TTRFFCCSAR-01_V2 © 2022 Intertek



Applicant: Suzhou EUP Electric Co., Ltd.
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Manufacturer: Suzhou EUP Electric Co., Ltd.
No.90, Jin Shan Road, He Xi New District, Suzhou, 215011, China

Factory: Suzhou EUP Electric Co., Ltd.
No.90, Jin Shan Road, He Xi New District, Suzhou, 215011, China

FCC ID: 2A8ST-SCOUTPLUS

SUMMARY:

The equipment complies with the requirements according to the following standard(s) or Specification:

447498 D04 Interim General RF Exposure Guidance v01
FCC Part2.1091, FCC Part2.1093 FCC Part1.1307(b)

PREPARED BY:**REVIEWED BY:**

Project Engineer
Sky Yang

Reviewer
Eric Li

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Revision History

Report No.	Version	Description	Issued Date
22081610SHA-002	Rev. 01	Initial issue of report	April 20, 2023

1 GENERAL INFORMATION

1.1 Description of Equipment Under Test (EUT)

Product name:	Vacuum cleaner
Model:	VC659D may be followed by one to five characters SCOUTPLUS may be followed by one to five characters
Description of EUT:	The product covered in this report is a vacuum cleaners intended for household indoor use only. The vacuum cleaner can be use with power nozzle connected with current carrying hose and extended steel. All models are same except the appearance.
Rating:	120V, 60Hz, 12A
Category of EUT:	Class B
EUT type:	<input type="checkbox"/> Table top <input checked="" type="checkbox"/> Floor standing
Software Version:	/
Hardware Version:	/
Sample number:	0220812-01
Sample received date:	August 18, 2022
Date of test:	August 22, 2022 ~ October 28, 2022

1.2 Technical Specification

Operation Frequency:	433.9MHz
Type of Modulation:	ASK
Product Type:	<input checked="" type="checkbox"/> Mobile <input type="checkbox"/> Portable <input type="checkbox"/> Fix Location
Channel Number:	1
Antenna Designation:	PCB antenna

1.3 Description of Test Facility

Name:	Intertek Testing Services Shanghai
Address:	Building 86, No. 1198 Qinzhou Road(North), Shanghai 200233, P.R. China
Telephone:	86 21 61278200
Telefax:	86 21 54262353

The test facility is recognized, certified, or accredited by these organizations:	CNAS Accreditation Lab Registration No. CNAS L0139
	FCC Accredited Lab Designation Number: CN0175
	IC Registration Lab CAB identifier.: CN0014
	VCCI Registration Lab Member No.: 3598 (Registration No.: R-14243, G-10845, C-14723, T-12252)
	A2LA Accreditation Lab Certificate Number: 3309.02

TEST REPORT

2 SAR Assessment

Test result: Pass

2.1 SAR Test Exclusion Limit

This method shall only be used at separation distances up to 40 cm and at frequencies from 0.3 GHz to 6 GHz (inclusive). P_{th} is given by Formula below:

$$P_{th} \text{ (mW)} = \begin{cases} ERP_{20 \text{ cm}} (d/20 \text{ cm})^x & d \leq 20 \text{ cm} \\ ERP_{20 \text{ cm}} & 20 \text{ cm} < d \leq 40 \text{ cm} \end{cases}$$

$$x = -\log_{10} \left(\frac{60}{ERP_{20 \text{ cm}} \sqrt{f}} \right)$$

f is in GHz, d is the separation distance (cm), and $ERP_{20 \text{ cm}}$ is per Formula above.

The example values shown in below are for illustration only.

	Distance (mm)										
		5	10	15	20	25	30	35	40	45	50
Frequency (MHz)	300	39	65	88	110	129	148	166	184	201	217
	450	22	44	67	89	112	135	158	180	203	226
	835	9	25	44	66	90	116	145	175	207	240
	1900	3	12	26	44	66	92	122	157	195	236
	2450	3	10	22	38	59	83	111	143	179	219
	3600	2	8	18	32	49	71	96	125	158	195
	5800	1	6	14	25	40	58	80	106	136	169

2.2 Assessment Results

As we can see from the test report 220801610SHA-001:

The highest EIRP adjusted with tune-up tolerance is: 51.3-95.3 = -44dBm=0.04uW
 0.04uW < 22mW (Test Exclusion Thresholds of 450MHz at 5mm). Therefore, the SAR requirement is deemed to be satisfied without test.

***** END *****