

# ANDREAS STIHL AG & Co. KG SAR COMPLIANCE REPORT

## **Report Type:**

FCC SAR assessment report

Model:

**RE 100.0 PLUS CONTROL** 

**REPORT NUMBER:** 

220601928SHA-002

**ISSUE DATE:** 

October 8, 2022

**DOCUMENT CONTROL NUMBER:** 

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Intertek Testing Services Shanghai Building No.86, 1198 Qinzhou Road (North) Caohejing Development Zone Shanghai 200233, China

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Report no.: 220601928SHA-002

**Applicant:** ANDREAS STIHL AG & Co. KG

Badstrasse 115, 71336 Waiblingen. Germany

Manufacturer: Kindclean Electric Green Technology (Suzhou) Co., Ltd.

Suzhou, Jiangsu | 215009

Factory: Kindclean Electric Green Technology (Suzhou) Co., Ltd.

Suzhou, Jiangsu | 215009

**PRODUCT NAME:** Pressure washer

TYPE/MODEL: RE 100.0 PLUS CONTROL

FCC ID: 2ALP8RE02A

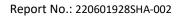
#### **SUMMARY:**

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

KDB447498 D01 General RF Exposure Guidance v07 FCC Part2.1091, FCC Part2.1093 FCC Part1.1307(b)

PREPARED BY:	REVIEWED BY:				
Scoutgang	Zrie. li				
Scout Gong	Eric Li				
Project Engineer	Reviewer				

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# **Revision History**

Report No.	Version	Description	Issued Date
220601928SHA-002	Rev. 01	Initial issue of report	October 8, 2022





## **1 GENERAL INFORMATION**

# 1.1 Description of Equipment Under Test (EUT)

Product name:	Pressure washer				
Type/Model:	RE 100.0 PLUS CONTROL				
Description of EUT:	The EUT is a pressure washer which equipped with 2428 MHz module, intended for domestic cleaning.				
Rating:	High pressure washer: 120V AC, 13A, 60Hz, 1.5KW				
	Remote module: 3V DC				
EUT type:	☐ Table top ☐ Floor standing				
Software Version:	/				
Hardware Version:	/				
Sample Identification No.:	0220808-23-001				
Sample received date:	August 08, 2022				
Date of test:	August 09, 2022~September 28, 2022				

# 1.2 Technical Specification

Operation Frequency:	2400MHz ~ 2483.5MHz				
Support Standards:	SRD				
Type of Modulation:	GFSK				
	Mobile				
	Portable				
Product Type:	Fix Location				
Channel Number:	1				
Antenna Designation:	Integral PCB antenna				
Gain of Antenna:	2.02dBi max				





# 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 Registration No.: R-14243, G-10845, C-14723, T-12252
	A2LA Accreditation Lab Certificate Number: 3309.02



## 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). Pth is given by Formula below:

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

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

f is in GHz, d is the separation distance (cm), and  $ERP_{20cm}$  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
( 7	300	39	65	88	110	129	148	166	184	201	217
(MHz)	450	22	44	67	89	112	135	158	180	203	226
ency	835	9	25	44	66	90	116	145	175	207	240
Frequency	1900	3	12	26	44	66	92	122	157	195	236
F	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

The highest EIRP adjusted with tune-up tolerance is 50.30-95.30 = -45.00dBm = 0.00003mW < 3mW (Test Exclusion Thresholds of 2450MHz at 5mm). Therefore, the SAR requirement is deemed to be satisfied without test.