

TEST REPORT



CTK Co., Ltd.

(Ho-dong), 113, Yejik-ro, Cheoin-gu,
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Tel: +82-31-339-9970
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Report No.:
CTK-2021-02288
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1. Client

- Name : Deepscent Inc.
- Address : E19 Nano Fab 9F, KAIST, Daehak-ro 291, Yuseong-gu, Daejeon, South Korea
- Date of Receipt : 2019-03-29

2. Manufacturer

- Name : Deepscent Inc.
- Address : E19 Nano Fab 9F, KAIST, Daehak-ro 291, Yuseong-gu, Daejeon, South Korea

3. Use of Report : For FCC Certification

4. Test Sample / Model : AromaStyler / ABV01WDAA

5. Date of Test : 2021-06-18

6. Test Standard(method) used : FCC 47 CFR part 1 subpart I 1.1310

7. Testing Environment: Temp.: (25 ± 1) °C, Humidity: (42 ± 5) % R.H

8. Test Results : Compliance

The results shown in this test report refer only to the sample(s) tested unless otherwise stated. This Test Report cannot be reproduced, except in full.

Affirmation	Tested by	Technical Manager
	Bong-jun Jang: (Signature) 	Young-taek Lee: (Signature) 

2021-06-18

Republic of KOREA **CTK Co., Ltd.**

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REPORT REVISION HISTORY

Date	Revision	Page No
2021-06-18	Issued (CTK-2021-02288)	all

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1. General Product Description

1.1 Client Information

Company	Deepscent Inc.
Contact Point	E19 Nano Fab 9F, KAIST, Daehak-ro 291, Yuseong-gu, Daejeon, South Korea
Contact Person	Name : Jung kiback E-mail : kiback@deepscent.io Tel : +82-10-2688-9688

1.2 Product Information

FCC ID	2ASKL-AROM-HOME-V1
BRAND	Deepscent
Product Description	AromaStyler
Model name	ABV01WDAA
Variant Model name	-
Operating Frequency	13.56 MHz
RF Output Power	14.95 dBuV/m @ 30m
Antenna Specification	PCB Antenna
Type of Modulation	ASK
Power Source	DC 5 V

1.3 Peripheral Devices

Device	Manufacturer	Model No.	Serial No.
Note Computer	Samsung Electronics Co., Ltd.	NT-R540	ZW3B93AZ900395N
AC/DC Adapter	Tech-Power Electric Co., Ltd.	NT01	09708530

2. Facility and Accreditations

2.1 Test Facility

The measurement facility is located at (Ho-dong), 113, Yejik-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, Korea.

2.2 Laboratory Accreditations and Listings

Country	Agency	Registration Number
USA	FCC	805871
CANADA	ISED	8737A-2
KOREA	NRRA	KR0025

2.3 Calibration Details of Equipment Used for Measurement

Test equipment and test accessories are calibrated on regular basis. The maximum time between calibrations is one year or what is recommended by the manufacturer, whichever is less. All test equipment calibrations are traceable to the Korea Research Institute of Standards and Science (KRISS), therefore, all test data recorded in this report is traceable to KRISS.

3. RF Exposure Assessment

3.1 Maximum Permissible Exposure

The following FCC Rule Parts and procedures are applicable :

Part 1.1310 Radiofrequency radiation exposure limits

Part 2.1091 Radiofrequency radiation exposure evaluation : Mobile device

KDB447498 D01 v06 Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies

Table 1 below sets forth limits for Maximum Permissible Exposure (MPE) to radiofrequency electromagnetic fields.

Table 1—Limits for Maximum Permissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm ²)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposure				
0.3-3.0	614	1.63	*100	6
3.0-30	1842/f	4.89/f	*900/f ²	6
30-300	61.4	0.163	1.0	6
300-1,500			f/300	6
1,500-100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*100	30
<u>1.34-30</u>	<u>824/f</u>	<u>2.19/f</u>	*180/f ²	30
30-300	27.5	0.073	0.2	30
300-1,500			f/1500	30
1,500-100,000			1.0	30

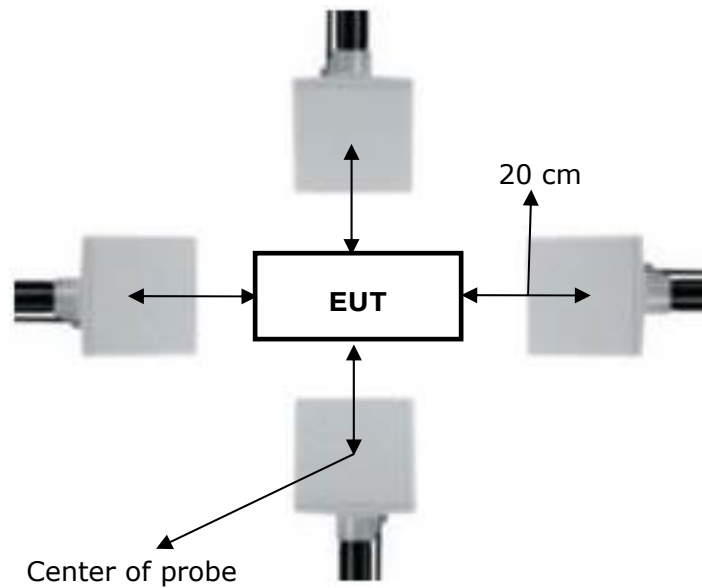
f = frequency in MHz(13.56 MHz)

** = Plane-wave equivalent power density*

Test method

- Performed aggregate both leakage E-field and H-field at surrounding the device.
- During the test, EUT was placed on a non-conductive table and tested in normal operation. Maximum E-field and H-field measurements were tested at a distance of 20 cm from each side of the EUT from the center of the probe. Along the side of the EUT to center of E-field probe and H-field probe were positioned at the location to search maximum field strength.

Test Setup



Test results

Maximum Permissible Exposure				
Condition	Separation	Probe from EUT Side	E-field (V / m)	H-field (A / m)
13.56 MHz + WiFi*	20 cm	Right	0.33	0.02
		Bottom	0.33	0.02
		Left	0.34	0.02
		Top	0.34	0.02
		Y-axis above EUT	0.33	0.02
Limit			60.77	0.162

* Simultaneous transmission between 13.56MHz transmitter and WiFi.

Conclusion

This confirms compliance to the required Radio frequency radiation exposure limit.

APPENDIX A – Test Equipment Used For Tests

No.	Name of Equipment	Manufacturer	Model No.	Serial No.	Date of Calibration	Due Date
1	Electric and Magnetic Field Analyzer	Narda	EHP-200AC	170WX91010	2019-11-28	2021-10-19
2	EHP200-TS Software	Narda	EHP200-TS	650.000.207	-	-

APPENDIX B – Test Photos

