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Issued date : Mar. 11, 2020 FCC ID : 2AHDGFONE540

# **Maximum Permissible Exposure Report**

**Product** : FONE540 Conference Speakerphone

**Model Name** : FONE540 BT

FCC ID : 2AHDGFONE540

**Test Regulation** : 47 CFR FCC Part 2.1091

**Received Date** : Jan. 15, 2020

**Issued Date** : Mar. 11, 2020

**Applicant** : AVer Information Inc.

8F, No.157, Da-An Rd., Tucheng Dist., New Taipei City

23673, Taiwan

**Issued By** : Underwriters Laboratories Taiwan Co., Ltd.

Building B and Building E, No. 372-7, Sec. 4, Zhongxing Rd.,

Zhudong Township, Hsinchu County, Taiwan





The results reported herein have been performed in accordance with the laboratory's terms of accreditation. This report shall not be reproduced except in full without the written approval of the Laboratory. The results in this report are responsible of the test sample(s) provided by the client only and are not to be used to indicate applicability to other similar products.

Telephone :+886-2-7737-3000

Facsimile (FAX) :+886-3-583-7948 Doc No: 17-EM-F0864 / 3.0



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## **REVISION HISTORY**

Original Test Report No.: 4789349230-US-R1-V0

Rev.	Test report No. 4789349230-US-R1-V0	Date	Page revised	Contents
Original	4789349230-US-R1-V0	Mar. 11, 2020	-	Initial issue

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#### 1. Attestation of Test Results

**APPLICANT:** AVer Information Inc.

8F, No.157, Da-An Rd., Tucheng Dist., New Taipei City 23673,

Taiwan

**MANUFACTURER** AVer Information Inc.

8F, No.157, Da-An Rd., Tucheng Dist., New Taipei City 23673,

Taiwan

**EUT DESCRIPTION:** FONE540 Conference Speakerphone

BRAND:

**MODEL:** FONE540 BT

**SAMPLE STAGE:** Engineering sample

#### APPLICABLE STANDARDS

**STANDARD** 

**Test Results** 

47 CFR FCC PART 2.1091

**PASS** 

Underwriters Laboratories Taiwan Co., Ltd. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by Underwriters Laboratories Taiwan Co., Ltd. based on interpretations and/or observations of test results. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

**Note:** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by Underwriters Laboratories Taiwan Co., Ltd. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by Underwriters Laboratories Taiwan Co., Ltd. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

Prepared By:

Approved and Authorized By:

Cindy Hsin Date Project Handler

Date: Mar. 11, 2020

Stanley Wu Da

Date: Mar. 11, 2020

Senior Project Engineer

#### Underwriters Laboratories Taiwan Co., Ltd.

Building B and Building E, No. 372-7, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County, Taiwan

Telephone :+886-2-7737-3000 Facsimile (FAX) :+886-3-583-7948

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## 2. Test Methodology

The tests documented in this report were performed in accordance with KDB 447498 D01 General RF Exposure Guidance v06.

### 3. Facilities and Accreditation

<b>Test Location</b>	Underwriters Laboratories Taiwan Co., Ltd.
Address	Building B and Building E, No. 372-7, Sec. 4, Zhongxing Rd., Zhudong Township, Hsinchu County, Taiwan
Accreditation Certificate	Underwriters Laboratories Taiwan Co., Ltd. is accredited by TAF, Laboratory Code 3398. The full scope of accreditation can be viewed at <a href="http://accreditation.taftw.org.tw/taf/public/basic/viewApplyItems.action?unitNo=3398">http://accreditation.taftw.org.tw/taf/public/basic/viewApplyItems.action?unitNo=3398</a>



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### 4. Equipment Under Test

### 4.1. Description of EUT

Product Name	FONE540 Conference Speakerphone			
Brand Name	<b>AVer</b>			
Model Name	FONE540 BT			
<b>Operating Frequency</b>	Bluetooth 2402MHz ~ 2480MHz			
Modulation	Bluetooth GFSK, π/4-DQPSK, 8DPSK			
Number of Channel	Bluetooth 79			
Normal Voltage	12Vdc for adapter			
Hardware Version	В			
Software Version	0.0.7000.14			

#### Note:

1. The EUT contains following accessory devices

Product	Brand	Model	Description
Power adapter	APD	DA-60N12	I/P:100-240Vac,50/60Hz
Tower adapter	Al D	DA-001112	O/P: 12Vdc, 5A
Power cord	PHINO	PHS-301	Length:1.8m, w/o ferrite core
USB 2.0 cable	N/A	FAAF-A342T	Length:4.9m
3.5 mm Audio Cable	N/A	M-3522	Length:1m
AVerlink Wireless Dongle	Aver	U020-W	N/A

2. The above EUT information is declared by manufacturer and for more detailed features description, please refer the manufacturer's or user's manual.



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### **4.2. Description Of Available Antennas**

Antenna	Brand Name	Model Name	Antenna Type	Antenna Gain(dBi)
Chain(0)	Joymax	TBF-A030MPAX-174H015	PCB	3.51

Note: The above antenna information was provided from customer and for more detailed features description, please refer the manufacturer's specification or user's manual.



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### 5. Requirement

Limits for General Population/Uncontrolled Exposure

Limits for General Population/Uncontrolled Exposure							
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	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 <sup>2</sup>	30			
30-300	27.5	0.073	0.2	30			
300-1500			f/1500	30			
1500-100,000			1.0	30			

Note 1: f = frequency in MHz, \* means Plane-wave equivalent power density

Note 2: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

Power Density (S) is calculated by the following formula:

 $S=(P*G)/4\pi R^2$ 

where: S = power density (in appropriate units, e.g. mW/ cm<sup>2</sup>)

P = power input to the antenna (in appropriate units, e.g., mW)

G = power gain of the antenna in the direction of interest relative to an isotropic radiator <math>R = distance to the center of radiation of the antenna (appropriate units, e.g., cm)



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### 6. Radio Frequency Radiation Exposure Evaluation

#### **Bluetooth**

Bluetooth						
Max. Average power	Max. Average power   Antenna Gain   Max. EIRP   Max. EIRP   Power density @ 20 cm   Limit					
(dBm)	(dBi)	(dBm)	(mW)	(mW/cm <sup>2</sup> )	(mW/cm <sup>2</sup> )	
5.74	3.51	9.25	8.414	0.002	1	

#### Note:

- 1. Max. EIRP (dBm) = Max. Average power (dBm) + Antenna Gain (dBi)
- 2. Max. EIRP (mW) =  $10^{\text{(Max. EIRP (dBm)}/10)}$
- 3. Power density (mW/cm<sup>2</sup>) = Max. EIRP (mW) / [  $4 \times \pi \times (calculated \ distance)^2$  ], the calculated distance is 20 cm.

#### **Conclusion:**

According to 47 CFR FCC Part 2.1091, the RF exposure analysis concludes that the RF Exposure is FCC compliant.

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