

## **MPE TEST REPORT**

**Applicant** Tabletop Media, LLC d/b/a Ziosk

FCC ID XOX-Z600

**Product** Wireless desktop multimedia player

**Brand** Ziosk

Marketing Z600

Model Z600

**Report No.** R2008A0553-M1

Issue Date September 21, 2020

TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **FCC 47 CFR Part 1 1.1310**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Prepared by: Yu Wang

Yu Wang

Approved by: Guangchang Fan

Guangchang Fan

# TA Technology (Shanghai) Co., Ltd.

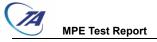
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**Test Laboratory** 

**Notes of the Test Report** 

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(shanghai) co., Ltd. The results documented in this report apply only to the tested sample, under the

conditions and modes of operation as described herein .Measurement Uncertainties were not taken

into account and are published for informational purposes only. This report is written to support

regulatory compliance of the applicable standards stated above.

1.2. Test facility

FCC (Designation number: CN1179, Test Firm Registration Number: 446626)

TA Technology (Shanghai) Co., Ltd. has been listed on the US Federal Communications Commission

list of test facilities recognized to perform electromagnetic emissions measurements.

**Testing Location** 

Company:

TA Technology (Shanghai) Co., Ltd.

Address:

No.145, Jintang Rd, Tangzhen Industry Park, Pudong Shanghai, China

City:

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201201

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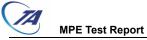
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Website:

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### **Laboratory Environment**

Temperature	Min. = 18°C, Max. = 25 °C	
Relative humidity	Min. = 30%, Max. = 70%	
Ground system resistance	< 0.5 Ω	
Ambient noise is checked and found very low and in compliance with requirement of stand		

Reflection of surrounding objects is minimized and in compliance with requirement of standards.



### 2 Description of Equipment under Test

#### **Client Information**

Applicant	Tabletop Media, LLC d/b/a Ziosk		
Applicant address	12404 park central drive, suite 350 Dallas, TX 75251		
Manufacturer	SHANGHAI XIANGCHENG COMMUNICATION TECHNOLOGY CO.,LTD		
Manufacturer address	ROOM 401,BUILDING 5,No.3000 LONGDONG AVENUE,SHANGHAI, China.		

#### **General Technologies**

Model	Z600	
SN	54474102F961	
Hardware Version	HW1.1	
Software Version	SW1.0	
Date of Testing:	August 20, 2020~ September 17, 2020	
Date of Sample Received:	August 20, 2020	

Note: 1. The EUT is sent from the applicant to TA and the information of the EUT is declared by the applicant.

2. All indications of Pass/Fail in this report are opinions expressed by TA Technology (Shanghai) Co., Ltd. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only.

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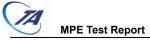


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### 3 Maximum conducted output power (measured) and antenna Gain

The numeric gain (G) of the antenna with a gain specified in dB is determined by Numeric gain (G)=10^(antenna gain/10)

Band	Maximum Conducted Output Power (dBm)		Antenna Gain	Numeric gain
	(dBm)	(mW)	(dBi)	
Wi-Fi 2.4G	19.400	87.096	3.000	1.995
Wi-Fi 5G	18.420	69.502	3.000	1.995
Bluetooth	8.470	7.031	3.000	1.995
Bluetooth (Low Energy)	-1.610	0.690	3.000	1.995



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#### 4 Test Result

According to section 1.1310 of FCC 47 CFR Part 1, limits for maximum permissible exposure (MPE) are as following

TABLE 1 – LIMITS FOR MAXIMUN PERMISSIBLE EXPOSURE (MPE)

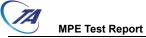
Frequency Range	Electric Field	Magnetic Field	Power Density	Averaging Time		
(MHz)	Strength	Strength		0.57		
0.000	(V/m)	(A/m)	(mW/cm2)	(minutes)		
(A) Limits for Occupational/Controlled Exposures						
0.3-3.0	614	1.63	*(100)	6		
3-30	1842/f	4.89/f	*(900/f2)	6		
30-300	61.4	0.163	1.0	6		
300-1500			f/300	6		
1500-100,000			5	6		
(B) Limits for General Population/Uncontrolled Exposure						
0.3-1.34	614	1.63	*(100)	30		
1.34-30	824/f	2.19/f	*(180/f2)	30		
30-300	27.5	0.073	0.2	30		
300-1500			f/1500	30		
1500-100,000			1.0	30		

f = frequency in MHz

Note1. Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational / controlled limits apply provided he or she is made aware of the potential for exposure.

Note2: 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 can not exercise control over their exposure.

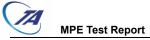
<sup>\* =</sup> Plane-wave equivalent power density



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The maximum permissible exposure for 1500~100,000MHz is 1.0.So

Band	The maximum permissible exposure		
Wi-Fi 2.4G	1.0mW/cm <sup>2</sup>		
Wi-Fi 5G	1.0mW/cm <sup>2</sup>		
Bluetooth	1.0mW/cm <sup>2</sup>		
Bluetooth (Low Energy)	1.0mW/cm <sup>2</sup>		



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#### **RF Exposure Calculations:**

The following information provides the minimum separation distance for the highest gain antenna provided. This calculation is based on the conducted power, considering maximum power and antenna gain. The formula shown in KDB 447498 D01 is used in the calculation.

Equation from KDB 447498 D01 General RF Exposure Guidance v06 (10/23/2015) is:

S= PG / 
$$4 \square R^2$$

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

P = Time-average maximum tune up procedure (in appropriate units, e.g., mW)

G = the numeric gain of the antenna

R = distance to the center of radiation of the antenna (20 cm = limit for MPE)

Band	PG (mW)	Test Result (mW/cm <sup>2</sup> )	Limit Value (mW/cm²)	Conclusion
Wi-Fi 2.4G	173.780	0.035	1.000	Pass
Wi-Fi 5G	138.676	0.028	1.000	Pass
Bluetooth	14.028	0.003	1.000	Pass
Bluetooth (Low Energy)	1.377	0.0003	1.000	Pass
Note: <b>R</b> = 20cm				

Note: **R** = 20cm  $\square$  = 3.1416

Note: For transmitters, minimum separation distance is 20cm, even if calculations indicate MPE distance is less.

\*\*\*\*\*\*END OF REPORT \*\*\*\*\*\*