

Report No.: GZCR210402015305

Page: 1 of 8 FCC ID: TG3-ST300

RF EXPOSURE EVALUATION REPORT

Application No.: GZCR2104020153AT **Applicant:** FKA Distributing Co., LLC

3000 N. Pontiac Trail, Commerce Township, Michigan, 48390, United States Address of Applicant:

Manufacturer: FKA Distributing Co., LLC

Address of Manufacturer: 3000 N. Pontiac Trail, Commerce Township, Michigan, 48390, United States Electrical Appliance Branch of Zhangzhou Easepal Industrial Corporation Factory: Address of Factory:

No.36 Longkun Road, Hongjian Village, Jiaomei Town, Zhangzhou

Taiwanese Investment Zone, Fujian China

Equipment Under Test (EUT):

EUT Name: Sand Table ST-300 Model No.:

47 CFR Part 1.1310 Standard(s):

KDB447498D01 General RF Exposure Guidance v06

Date of Receipt: 2021-04-20

2021-04-25 to 2021-04-28 **Date of Test:**

Date of Issue: 2021-06-25

Test Result: Pass*

EMC Laboratory Manager

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^{*} In the configuration tested, the EUT complied with the standards specified above.



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Revision Record						
Version	Chapter	Date	Date Modifier Remark			
01		2021-06-25		Original		

Authorized for issue by:			
Tested By	Jim Li		
-	Jim LiProject Engineer		
Reviewed By	RidgeLin		
	Ricky LiuReviewer		



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3 General Information

3.1 Details of E.U.T.

DC 12 V powered by SWITCHING ADAPTER:

Model No.:GQ48-120400-E1

Power supply: Input:100-240V ~ 50/60Hz, 1.5A Max

Output:12.0V, 4.0A, 48.0W

Cable(s):

AC mains input cable:3 wires, 3.6m, unshielded.

DC output cable: 2 wires, 1.2m, unshielded.

Function: Sand Table with BLE function

Operation Frequency: 2402MHz to 2480MHz

Modulation Type: GFSK Number of Channels: 40 Channel Spacing: 2MHz

Antenna Type: Integral Antenna

Antenna Gain: 0dBi declared by applicant.

Software Version: SV01 Hardware Version: HW01

Testing Software: CMOSTEK.exe Sample NO.: KS2103310001

Power Setting -1 dBm cannot be changed by user

3.2 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Shenzhen, Guangdong, China. 518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594



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3.3 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

• NVLAP (Lab Code: 200611-0)

SGS-CSTC Standards Technical Services Co., Ltd., Guangzhou EMC Laboratory is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP/NIST). NVLAP Code: 200611-0.

The report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.

ACMA

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory can also perform testing for the Australian/New Zealand Regulatory Compliance Mark (RCM).

• SGS UK(Certificate No.: 32), SGS-TUV SAARLAND and SGS-FIMKO

Have approved SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory as a supplier of EMC TESTING SERVICES and SAFETY TESTING SERVICES.

CNAS (Lab Code: L0167)

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been assessed and in compliance with CNAS-CL01:2018 accreditation criteria for testing laboratories (identical to ISO/IEC 17025:2017 General Requirements) for the Competence of Testing Laboratories.

• FCC Recognized Accredited Test Firm(Registration No.: 486818)

SGS-CSTC Standards Technical Services Co., Ltd., EMC Laboratory has been accredited and fully described in a report filed with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files. Designation Number: CN5016, Test Firm Registration Number: 486818.

• ISED (Registration No.: 4620B, CAB identifier: CN0052)

SGS-CSTC Standards Technical Services Co., Ltd., has been registered by Innovation Science and Economic Development Canada for Wireless Device Testing laboratories to test to Canadian radio equipment requirements. Registration No. 4620B, CAB identifier: CN0052.

VCCI (Registration No.: R-12460, C-12584, G-20107 and T-11179)

The 10m Semi-anechoic chamber, 966 Anechoic Chamber and Shielded Room of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: R-12460, C-12584, G-20107 and T-11179 respectively.

• CBTL (Lab Code: TL129)

SGS-CSTC Standards Technical Services Co., Ltd., E&E Laboratory has been assessed and fully comply with the requirements of ISO/IEC 17025:2017, the Basic Rules, IECEE 01 and Rules of procedure IECEE 02, and the relevant IECEE CB-Scheme Operational documents.

3.4 Deviation from Standards

None

3.5 Abnormalities from Standard Conditions

None



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4 Technical Requirements Specification

4.1 RF Exposure Evaluation

4.1.1 Limit & Test Method

According to FCC Part1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in Part1.1307(b)

TABLE 1—LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm²)	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			
1.34-30	824/f	2.19/f	*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

According to IEEE C95.3:2002 section 5.5.1.1, The power density S at a point on the axis at a distance d from a transmitting antenna is given by the Friis free-space transmission formula

$$S = \frac{PG}{4\pi d^2}$$

S = power density (mW/cm²)

P = the net power delivered to the antenna (mW)

G = gain of the antenna in linear scale

d = distance between observation point and center of the radiator (cm)



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^{* =} Plane-wave equivalent power density



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4.1.2 Test Data and Test Result

Normal use condition for

Distance between 20cm declared by applicant

antenna and body:

Frequency (MHz)	Antenna Gain (Numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm²)	Limit of Power Density (S) (mW/cm ²)	Test Result
2402	1	-1.06	0.783	0.00016	1	Complies
2440	1	-0.70	0.851	0.00017	1	Complies
2480	1	-2.13	0.612	0.00012	1	Complies

So SAR report is not required.



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5 EUT Constructional Details (EUT Photos)

Refer to Appendix - Photographs of EUT Constructional Details for GZCR2104020153AT

- End of the Report -



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