ACCREDITED
Certificate # 5200.01

RF Exposure Report

FCC ID:	2A6XZ-LAGOFRAME01
Applicant:	Lago Digital, Inc.
Address:	530 7th Ave Suite 1001 NY, NY 10018
Manufacturer:	Lago Digital, Inc.
Address:	530 7th Ave Suite 1001 NY, NY 10018
Product(s):	33 inch Frame
Brand(s):	N/A
Test Model(s):	LAGO Frame Genesis
Series Model(s):	N/A
Test Date:	Apr. 24, 2022~ May 31, 2022
Issued Date:	Jun. 02, 2022
Issued By:	Hwa-Hsing (Dongguan) Testing Co., Ltd.
Address:	No.101, Bld N1, Yuyuan 2Rd, Yuyuan Industrial Park, HuangJiang Town, Dongguan, China
Test Firm Registration No.:	915896
Standards:	FCC Part 2 (Section 2.1091) 447498 D04 Interim General RF Exposure Guidance v01 IEEE C95.1

The above equipment has been tested by **Hwa-Hsing (Dongguan) Testing Co., Ltd.**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by : Tank Tan — *Tank Tan*

Reviewed by : Scott He — *Scott He*

Approved by : *Harry Li*

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Release control record

Issue No.	Reason for change	Date issued
220214EL03-SE-US-01	Original Release	Jun. 02, 2022

1 General Information

1.1 General Description of EUT

Product(s)	33 inch Frame
Test Model(s)	LAGO Frame Genesis
Sample No.	HS220509-01-15
Series Model(s)	N/A
Status of EUT	Engineering Prototype
Power Supply Rating	AC 100~240V/1.2A/ 50~60 Hz 120W
Modulation Type	WiFi: CCK, DQPSK, DBPSK for DSSS 64QAM, 16QAM, QPSK, BPSK for OFDM Bluetooth: GFSK, π/4 DQPSK,8DPSK
Modulation Technology	WiFi 2.4GHz: DSSS; OFDM WiFi 5GHz: OFDM Bluetooth: FHSS/BT-LE
Transfer Rate	Wi-Fi 2.4GHz: 802.11b:11.0/ 5.5/ 2.0/ 1.0Mbps 802.11g: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to 300Mbps Wi-Fi 5GHz: 802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0Mbps 802.11n: up to 300Mbps 802.11ac: up to 866.7Mbps Bluetooth: 1Mbps/2 Mbps/3 Mbps
Operating Frequency	Wi-Fi 2.4GHz: 802.11b, 802.11g, 802.11n (HT20): 2412 ~ 2472MHz 802.11n (HT40): 2422 ~ 2462MHz Wi-Fi 5GHz: 5180MHz ~ 5240MHz; 5260MHz ~ 5320MHz; 5500MHz ~ 5700MHz; 5745MHz ~ 5825MHz Bluetooth: 2402MHz ~ 2480 MHz
Output Power (AVG)	Wi-Fi 5GHz: 19.45dBm for 5150 ~ 5250MHz 18.97dBm for 5250 ~ 5350MHz 19.18dBm for 5470 ~ 5725MHz 18.99dBm for 5725 ~ 5850MHz Wi-Fi 2.4GHz: 18.25dBm Bluetooth: -4.621dBm
Antenna Type	Dipole Antenna
Antenna Gain	Wi-Fi 2.4GHz: 2.5dBi Wi-Fi 5G: 3.0dBi for 5150 ~ 5250MHz 3.0dBi for 5250 ~ 5350MHz 3.0dBi for 5470 ~ 5725MHz 3.0dBi for 5725 ~ 5850MHz Bluetooth: 2.5dBi
Antenna Connector	I-PEX
Accessory Device	N/A
Cable Supplied	AC Lines: 200cm

Note:

1. Please refer to the EUT photo document (Reference No.: 220214EL03-01&-02) for detailed product photo.
2. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or User's Manual.

2 RF exposure limit

Limits for maximum permissible exposure (MPE)

Table 1 – Synopsis of FCC RF Exposure Limits for Mobile and Portable Devices		
f ≤ 100 kHz		All devices assessed case-by-case (guidelines for wireless power transfer devices are provided KDB Pub. 680106)
100 kHz ~ 300 kHz		SAR limits in § 1.1310 (b), (c), (d)
300 kHz ~6 GHz	☐ Portable device	SAR limits in § 1.1310 (b), (c), (d)
	☒ Mobile device	Per § 2.1093(d) SAR limits in § 1.1310 (b), (c), (d) or ☒ Per § 1.1310(d)(2) MPE limits in § 1.1310(e)(1) -Table 1
f > 6 GHz		For all devices, MPE limits in § 1.1310(e)(1) - Table 1

§ 1.1310(d)(2) MPE limits in § 1.1310(e)(1) -Table 1

(i) Limits for Occupational/Controlled Exposure				
Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm2)	Averaging time (minutes)
0.3-3.0	614	1.63	*(100)	≤6
3.0-30	1842/f	4.89/f	*(900/f2)	≤6
30-300	61.4	0.163	1	≤6
300-1500			f/300	≤6
1500-100000			5	≤6
f = frequency in MHz. * = Plane-wave equivalent power density.				

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm2)	Averaging time (minutes)
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
1500-100000			1.0	<30
(ii) Limits for General Population/Uncontrolled Exposure				

2.1 MPE calculation formula

Pd = (Pout*G) / (4*pi*r^2)

Where:

Pd = power density in mW/cm^2

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

Classification:

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user.

3 Calculation result of maximum conducted power

The antennas provided to the EUT, please refer to the following table:

Function	Frequency Band	Antenna Gain (dBi)	Antenna Type	Transmit and Receive Chain	Maximum AVG Power(dBm)
Bluetooth	2400~2483.5MHz	2.50	External	2TX,2RX	-4.621
WiFi 2.4GHz	2400~2483.5MHz	2.50	External	2TX,2RX	18.25
WiFi 5GHz	5150 ~ 5250MHz	3.00	External	2TX,2RX	19.45
WiFi 5GHz	5250 ~ 5350MHz	3.00	External	2TX,2RX	18.97
WiFi 5GHz	5470 ~ 5725MHz	3.00	External	2TX,2RX	19.18
WiFi 5GHz	5725 ~ 5850MHz	3.00	External	2TX,2RX	18.99

Function	Max power (mW)	Antenna gain (dBi)	Distance (cm)	Power density (mW/cm^2)	Limit (mW/cm^2)
Bluetooth	0.345	2.5	20	0.00006	1.0
WiFi 2.4GHz	66.834	2.5	20	0.023644	1.0
WiFi 5.1~5.7GHz	88.105	3.00	20	0.052584	1.0
WiFi 5.8GHz	79.250	3.00	20	0.047298	1.0

Note: The above wireless function can not be transmission simultaneous.

Conclusion:

Therefore, the worst-case situation is 0.052584 mW/cm^2, which is less than “1”. This confirmed that the device compliance with FCC 1.1310 MPE limit.

Appendix – Information on the Testing Laboratories

We, Hwa-Hsing (Dongguan) Co., Ltd., A global provider of TESTING and CERTIFICATION services for consumer products, electronic products and wireless information technology products. Adhering to the core values “HONEST and TRUSTWORTHY, OBJECTIVE and IMPARTIALITY, RIGOROUS and AFFICIENT”, commitment to provide professional, perfect and efficient comprehensive ONE-STOP solution of TESTING and CERTIFICATION services for Manufacturers, Buyers, Traders, Brands, Retailers. Assist client to better manage risk, protect their brands, reduce costs and cut time to over 150 markets in global. Our laboratories are FCC recognized accredited test firms and accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

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