



Shenzhen HTT Technology Co., Ltd.

RF Exposure MPE	
Report Reference No.....	HTT202606671F06
FCC ID.....	2A4WP-GMBS3100A1
Compiled by (position+printed name+signature) .:	File administrators Heber He
Supervised by (position+printed name+signature) .:	Project Engineer Bruce Zhu
Approved by (position+printed name+signature) .:	RF Manager Kevin Yang
Date of issue	Aug. 17, 2026
Testing Laboratory Name	Shenzhen HTT Technology Co.,Ltd.
Address.....	1F, Building B, Huafeng International Robotics Industrial Park, Hangcheng Road,Nanchang Community, Xixiang Street, Bao'an District, Shenzhen, Guangdong, China
Applicant's name.....	Shenzhen Speediance Living Technology co., Ltd.
Address.....	19th Floor, Gemdale Viseen Tower A, No.16, Gaoxin 10th South Road, High-tech Zone, Yuehai Street, Nanshan District, Shenzhen
Standard	47CFR §1.1310 47CFR §2.1091 KDB447498 D01 General RF Exposure Guidance v06
Shenzhen HTT Technology Co.,Ltd. All rights reserved. This publication may be reproduced in whole or in part for non-commercial purposes as long as the Shenzhen HTT Technology Co.,Ltd. is acknowledged as copyright owner and source of the material. Shenzhen HTT Technology Co.,Ltd. takes no responsibility for and will not assume liability for damages resulting from the reader's interpretation of the reproduced material due to its placement and context.	
Test item description	Interactive Multi-Media DigitalFitness Equipment
Manufacturer	Shenzhen Speediance Living Technology co., Ltd.
Trade Mark	Speediance
Model/Type reference	GMBS3100A1
Rating	Input: 100-240V~, 50/60Hz, 900W
Result	PASS

TEST REPORT

Equipment under Test : Interactive Multi-Media DigitalFitness Equipment

Model /Type : GMBS3100A1

Listed Models : GMBS3100A2,GMBS3100A3,GMBS3100A4,GMBS3100A5

Model difference : The PCB board, circuit, structure and internal of these models are the same, Only model number is different for these model.

Applicant : **Shenzhen Speediance Living Technology co., Ltd.**

Address : 19th Floor, Gemdale Viseen Tower A, No.16, Gaoxin 10th South Road, High-tech Zone, Yuehai Street, Nanshan District, Shenzhen

Manufacturer : **Shenzhen Speediance Living Technology co., Ltd.**

Address : 19th Floor, Gemdale Viseen Tower A, No.16, Gaoxin 10th South Road, High-tech Zone, Yuehai Street, Nanshan District, Shenzhen

Test Result:	PASS
---------------------	-------------

The test report merely corresponds to the test sample.
It is not permitted to copy extracts of these test result without the written permission of the test laboratory.

Contents

<u>1</u>	<u>TEST STANDARDS</u>	<u>4</u>
<u>2</u>	<u>SUMMARY</u>	<u>5</u>
2.1	General Remarks	5
2.2	Product Description	5
2.3	Special Accessories	6
2.4	Modifications	6
<u>3</u>	<u>TEST ENVIRONMENT</u>	<u>7</u>
3.1	Address of the test laboratory	7
3.2	Test Facility	7
3.3	Statement of the measurement uncertainty	7
<u>4</u>	<u>TEST LIMIT</u>	<u>8</u>
4.1	Requirement	8
4.2	MPE Calculation Method	8
4.3	Conducted Power Results	9
4.4	Manufacturing tolerance	12
4.5	Standalone MPE Result	12
4.6	Simultaneous Transmission for MPE Result	12
<u>5</u>	<u>CONCLUSION</u>	<u>12</u>

1 TEST STANDARDS

The tests were performed according to following standards:

[ANSI C95.1-1999](#): IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.

[FCC KDB 447498 D01 General RF Exposure Guidance v06](#): Mobile and Portable Device, RF Exposure, Equipment Authorization Procedures.

[FCC CFR 47 part1 1.1310](#): Radiofrequency radiation exposure limits.

[FCC CFR 47 part2 2.1091](#): Radiofrequency radiation exposure evaluation: mobile devices

2 SUMMARY

2.1 General Remarks

Date of receipt of test sample	:	Jun. 23, 2026
Testing commenced on	:	Jun. 23, 2026
Testing concluded on	:	Aug. 17, 2026

2.2 Product Description

Product Name:	Interactive Multi-Media DigitalFitness Equipment
Model/Typereference:	GMBS3100A1
Power supply:	Input: 100-240V~, 50/60Hz, 900W
Hardware version:	/
Software version:	/
testing sample ID:	HTT202606671-1# (Engineer sample) HTT202606671-2# (Normal sample)
WIFI 2.4G:	
Supported type:	802.11b/802.11g/802.11n(HT20)/802.11ax (HE20)
Modulation:	802.11b: DSSS 802.11g/802.11n(HT20):OFDM 802.11ax (HE20): OFDMA
Operation frequency:	802.11b/802.11g/802.11n(H20)/802.11ax (HE20): 2412MHz~2462MHz
Channel number:	802.11b/802.11g/802.11n(HT20)/802.11ax (HE20): 11
Channel separation:	5MHz
Antenna type:	FPC Antenna
Antenna gain:	Ant1: 3.19dBi Ant2: 3.01dBi
Bluetooth BLE	
Supported type:	Bluetooth low Energy
Modulation:	GFSK
Operation frequency:	2402MHz to 2480MHz
Channel number:	40
Channel separation:	2 MHz
Bit Rate of Transmitter:	1Mbps/2Mbps
Antenna type:	FPC Antenna
Antenna gain:	2.98dBi
Bluetooth BR/EDR:	
Supported Type:	Bluetooth BR/EDR
Modulation:	GFSK, $\pi/4$ DQPSK, 8DPSK
Operation frequency:	2402MHz~2480MHz
Channel number:	79
Channel separation:	1MHz
Antenna type:	FPC Antenna

Antenna gain:	2.98 dBi
WIFI 5G:	
WLAN	Supported 802.11 a/n/ac/ax
Modulation Type	IEEE 802.11a: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11n: OFDM (64QAM, 16QAM, QPSK, BPSK) IEEE 802.11ac: OFDM (BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM) IEEE 802.11ax: OFDM/OFDMA (BPSK, QPSK, 16-QAM, 64-QAM, 256-QAM, 1024-QAM)
Operation frequency	IEEE 802.11a: 5180-5240MHz, 5260-5320MHz, 5500-5700MHz, 5745-5825MHz IEEE 802.11n HT20: 5180-5240MHz, 5260-5320MHz, 5500-5700MHz, 5745-5825MHz IEEE 802.11n HT40: 5190-5230MHz, 5270-5310MHz, 5510-5670MHz, 5755-5795MHz IEEE 802.11ac VHT20: 5180-5240MHz, 5260-5320MHz, 5500-5700MHz, 5745-5825MHz IEEE 802.11ac VHT40: 5190-5230MHz, 5270-5310MHz, 5510-5670MHz, 5755-5795MHz IEEE 802.11ac VHT80: 5210MHz, 5290MHz, 5530MHz, 5610MHz, 5775MHz IEEE 802.11ax HEW20: 5180-5240MHz, 5260-5320MHz, 5500-5700MHz, 5745-5825MHz IEEE 802.11ax HEW40: 5190-5230MHz, 5270-5310MHz, 5510-5670MHz, 5755-5795MHz IEEE 802.11ax HEW80: 5210MHz, 5290MHz, 5530MHz, 5610MHz, 5775MHz
Channel number	4 Channels for 20MHz bandwidth(5180-5240MHz) 4 Channels for 20MHz bandwidth(5260-5320MHz) 11 Channels for 20MHz bandwidth(5500-5700MHz) 5 channels for 20MHz bandwidth(5745-5825MHz) 2 channels for 40MHz bandwidth(5190~5230MHz) 2 channels for 40MHz bandwidth(5270~5310MHz) 5 Channels for 40MHz bandwidth(5510-5670MHz) 2 channels for 40MHz bandwidth(5755~5795MHz) 1 Channels for 80MHz bandwidth(5210MHz) 1 Channels for 80MHz bandwidth(5290MHz) 2 Channels for 80MHz bandwidth(5530MHz, 5610MHz) 1 channels for 80MHz bandwidth(5775MHz)
Antenna type:	FPC Antenna
Antenna gain:	ANT1: 2.65dBi for 5180-5240MHz, 2.71dBi for 5260-5320MHz, 2.77dBi for 5500-5700MHz, 2.55 dBi for 5745-5825MHz ANT2: 2.79dBi for 5180-5240MHz, 2.93dBi for 5260-5320MHz, 3.17dBi for 5500-5700MHz, 2.64 dBi for 5745-5825MHz

2.3 Special Accessories

The following is the EUT test of the auxiliary equipment provided by the laboratory:

Description	Manufacturer	Model	Technical Parameters	Certificate	Provided by
/	/	/	/	/	/

2.4 Modifications

No modifications were implemented to meet testing criteria.

3 TEST ENVIRONMENT

3.1 Address of the test laboratory

Shenzhen HTT Technology Co.,Ltd.

1F, Building B, Huafeng International Robotics Industrial Park, Hangcheng Road,Nanchang Community, Xixiang Street, Bao'an District, Shenzhen, Guangdong, China

3.2 Test Facility

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

FCC-Registration No.: 779513 Designation Number: CN1319

Shenzhen HTT Technology Co.,Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform electromagnetic emissions measurements.

A2LA-Lab Cert. No.: 6435.01

Shenzhen HTT Technology Co.,Ltd. has been listed by American Association for Laboratory Accreditation to perform electromagnetic emission measurement.

The 3m-Semi anechoic test site fulfils CISPR 16-1-4 according to ANSI C63.10 and CISPR 16-1-4:2010.

3.3 Statement of the measurement uncertainty

The data and results referenced in this document are true and accurate. The reader is cautioned that there may be errors within the calibration limits of the equipment and facilities. The measurement uncertainty was calculated for all measurements listed in this test report acc. to TR-100028-01" Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics; Part 1" and TR-100028-02 "Electromagnetic compatibility and Radio spectrum Matters (ERM);Uncertainties in the measurement of mobile radio equipment characteristics; Part 2 " and is documented in the Shenzhen HTT Technology Co.,Ltd. quality system acc. to DIN EN ISO/IEC 17025. Furthermore, component and process variability of devices similar to that tested may result in additional deviation. The manufacturer has the sole responsibility of continued compliance of the device.

Hereafter the best measurement capability for Shenzhen HTT Technology Co.,Ltd. :

Test	Range	Measurement Uncertainty	Notes
Radiated Emission	9KHz~30MHz	3.12 dB	(1)
Radiated Emission	30~1000MHz	4.37 dB	(1)
Radiated Emission	1~18GHz	5.40 dB	(1)
Radiated Emission	18-40GHz	5.45 dB	(1)
Conducted Disturbance	0.15~30MHz	2.68 dB	(1)
Output Peak power	30MHz~18GHz	0.57 dB	(1)
Power spectral density	/	0.54 dB	(1)
Spectrum bandwidth	/	1.2%	(1)
Radiated spurious emission (30MHz-1GHz)	30~1000MHz	4.25 dB	(1)
Radiated spurious emission (1GHz-18GHz)	1~18GHz	4.15 dB	(1)
Radiated spurious emission (18GHz-40GHz)	18-40GHz	5.35 dB	(1)

4 Test limit

4.1 Requirement

Limits for Maximum Permissible Exposure (MPE)/Controlled Exposure

Frequency Range(MHz)	Electric Field Strength(V/m)	Magnetic Field Strength(A/m)	Power Density (mW/cm ²)	Averaging Time (minute)
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 – 1500	/	/	f/300	6
1500 – 100,000	/	/	5	6

Limits for Maximum Permissible Exposure (MPE)/Uncontrolled Exposure

Frequency Range(MHz)	Electric Field Strength(V/m)	Magnetic Field Strength(A/m)	Power Density (mW/cm ²)	Averaging Time (minute)
Limits for Occupational/Controlled Exposure				
0.3 – 3.0	614	1.63	(100) *	30
3.0 – 30	824/f	2.19/f	(180/f ²)*	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

*=Plane-wave equivalent power density

4.2 MPE Calculation Method

Predication of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

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

Where: S=power density

P=power input to antenna

G=power gain of the antenna in the direction of interest relative to an isotropic radiator

R=distance to the center of radiation of the antenna

4.3 Conducted Power Results

Mode	TX Type	Frequency (MHz)	Packet Type	Maximum Peak Conducted Output Power (dBm)
				ANT1
GFSK	SISO	2402	DH5	7.56
		2441	DH5	8.56
		2480	DH5	8.89
Pi/4DQPSK	SISO	2402	2DH5	7.26
		2441	2DH5	8.34
		2480	2DH5	8.48
8DPSK	SISO	2402	3DH5	7.64
		2441	3DH5	8.78
		2480	3DH5	8.93

Mode	TX Type	Frequency (MHz)	Maximum Peak Conducted Output Power (dBm)
			ANT1
1M	SISO	2402	7.39
		2440	8.04
		2480	8.41
2M	SISO	2402	7.49
		2440	8.18
		2480	8.55

Mode	TX Type	Frequency (MHz)	Maximum Peak Conducted Output Power (dBm)		
			ANT1	ANT2	MIMO
802.11b	MIMO	2412	13.17	13.53	16.36
		2437	11.33	11	14.18
		2462	11.22	11.16	14.2
802.11g	MIMO	2412	16.14	16.46	19.31
		2437	16.75	17.51	20.16
		2462	16.84	17.85	20.38
802.11n (HT20)	MIMO	2412	16.9	17.91	20.44
		2437	16.71	17.73	20.26
		2462	16.86	17.71	20.32
802.11ax (HEW20)	MIMO	2412	18.58	19.11	21.86
		2437	18.07	18.64	21.37
		2462	18.42	19.05	21.76

Mode	TX Type	Frequency (MHz)	Maximum Average Conducted Output Power (dBm)		
			ANT1	ANT2	MIMO
802.11a	MIMO	5180	5.64	5.46	8.56
		5200	5.9	5.87	8.9
		5240	6.46	6.81	9.65
		5260	5.63	6.19	8.93
		5300	5.02	5.68	8.37
		5320	4.8	5.13	7.98
		5500	5.47	6.52	9.04
		5600	5.63	5.45	8.55
		5700	5.59	6.91	9.31
		5745	4.97	7.38	9.35
		5785	4.87	7.41	9.33
		5825	4.98	7.3	9.3
802.11n (HT20)	MIMO	5180	5.33	5.18	8.27
		5200	5.61	5.53	8.58
		5240	5.93	6.53	9.25
		5260	5.31	5.94	8.65
		5300	4.59	5.45	8.05
		5320	4.49	4.71	7.61
		5500	5.17	6.26	8.76
		5600	5.3	5.33	8.33
		5700	5.16	6.65	8.98
		5745	4.69	7	9.01
		5785	4.49	7.21	9.07
		5825	4.64	7.1	9.05
802.11n (HT40)	MIMO	5190	5.72	5.29	8.52
		5230	6.34	6.19	9.28
		5270	5.44	5.77	8.62
		5310	4.73	5.03	7.89
		5510	5.4	6.37	8.92
		5590	5.46	5.6	8.54
		5670	6.05	6.4	9.24
		5755	5.34	7.52	9.58
		5795	5.21	7.5	9.51
802.11ac (VHT20)	MIMO	5180	5.04	4.96	8.01
		5200	5.5	5.41	8.47
		5240	5.89	6.4	9.16
		5260	5.14	5.69	8.43
		5300	4.56	5.27	7.94
		5320	4.36	4.79	7.59
		5500	5.15	6.17	8.7
		5600	5.29	5.18	8.25

		5700	4.87	6.41	8.72
		5745	4.76	6.96	9.01
		5785	4.42	7.07	8.95
		5825	4.55	7.1	9.02
802.11ac (VHT40)	MIMO	5190	5.69	5.13	8.43
		5230	6.18	6.26	9.23
		5270	5.33	5.66	8.51
		5310	4.71	5.09	7.91
		5510	5.22	6.3	8.8
		5590	5.36	5.48	8.43
		5670	5.96	6.19	9.09
		5755	5.22	7.35	9.42
		5795	5.29	7.37	9.46
802.11ac (VHT80)	MIMO	5210	5.56	5.75	8.67
		5290	4.97	5.33	8.16
		5530	5.66	6.87	9.32
		5610	6.14	6.33	9.25
		5775	5.63	8.09	10.04
802.11ax (HEW20)	MIMO	5180	5.14	5.07	8.12
		5200	5.65	5.43	8.55
		5240	6.01	6.46	9.25
		5260	5.33	5.86	8.61
		5300	4.61	5.41	8.04
		5320	4.62	4.88	7.76
		5500	5.27	6.36	8.86
		5600	5.43	5.32	8.39
		5700	5.14	6.51	8.89
		5745	4.74	7.14	9.11
		5785	4.62	7.2	9.11
		5825	4.73	7.17	9.13
802.11ax (HEW40)	MIMO	5190	5.87	5.32	8.61
		5230	6.47	6.38	9.44
		5270	5.61	5.99	8.81
		5310	5.05	5.14	8.11
		5510	8.32	7.65	11.01
		5590	5.52	5.7	8.62
		5670	6.06	6.52	9.31
		5755	5.28	7.62	9.62
		5795	5.28	7.69	9.66
802.11ax (HEW80)	MIMO	5210	5.94	6.03	9
		5290	5.4	5.51	8.47
		5530	6.09	7.19	9.69
		5610	6.45	6.64	9.56
		5775	5.99	8.28	10.29

4.4 Manufacturing tolerance

Mode	Max. Peak Conducted Output Power (dBm)	Max. tune-up
BT	8.93	9.0 ± 1
BLE	8.55	9.0 ± 1
2.4GWIFI Ant1	18.58	19.0 ± 1
2.4GWIFI Ant2	19.11	19.0 ± 1
Mode	Max. Average Conducted Output Power (dBm)	Max. tune-up
5GWIFI Ant1	8.32	9.0 ± 1
5GWIFI Ant2	8.28	9.0 ± 1

4.5 Standalone MPE Result

As declared by the Applicant, the EUT is a wireless device used in a fix application, at least 20 cm from any body part of the user or nearby persons; from the maximum EUT RF output power, the minimum separation distance, $r = 20\text{cm}$, as well as the gain of the used antenna is refer to section 2.2, the RF power density can be obtained.

Modulation Type	Output power		Antenna Gain (dBi)	Antenna Gain (linear)	MPE (mW/cm ²)	MPE Limits (mW/cm ²)	MPE Limits (Ratio)
	dBm	mW					
BT	10.0	10.0000	2.98	1.9861	0.0040	1.0000	0.0040
BLE	10.0	10.0000	2.98	1.9861	0.0040	1.0000	0.0040
2.4GWIFI Ant1	20.0	100.0000	3.19	2.0845	0.0415	1.0000	0.0415
2.4GWIFI Ant2	20.0	100.0000	3.01	1.9999	0.0398	1.0000	0.0398
5GWIFI Ant1	10.0	10.0000	2.77	1.8923	0.0038	1.0000	0.0038
5GWIFI Ant2	10.0	10.0000	3.17	2.0749	0.0041	1.0000	0.0041

Remark:

1. Output power (Peak) including turn-up tolerance;
2. MPE evaluate distance is 20cm from user manual provide by manufacturer.

4.6 Simultaneous Transmission for MPE Result

2.4GWIFI ANT1 MPE (Ratio)	2.4GWIFI ANT2 MPE (Ratio)	BT MPE (Ratio)	simultaneous MPE (Ratio)	MPE Limits (Ratio)
0.0415	0.0398	0.0040	0.0853	1.0000

5 Conclusion

The measurement results comply with the FCC Limit per 47 CFR 2.1091 for the uncontrolled RF Exposure of mobile device Threshold per KDB 447498 D01v06

***** End of Report *****