Shenzhen Global Test Service Co.,Ltd.

No.7-101 and 8A-104, Building 7 and 8, DCC Cultural and Creative Garden, No.98, Pingxin North Road, Shangmugu Community, Pinghu Street, Longgang District, Shenzhen, Guangdong

RF Exposure evaluation

Report Reference No...... GTS20240806004-4-05 FCC ID.....: 2AG7C-BABY6-6062

Compiled by

(position+printed name+signature)..: File administrators Peter Xiao

Supervised by

Test Engineer Evan Ouyang (position+printed name+signature)..:

Approved by

(position+printed name+signature)..: Manager Jason Hu

Date of issue....: Sep.06, 2024

Representative Laboratory Name.: Shenzhen Global Test Service Co., Ltd.

No.7-101 and 8A-104, Building 7 and 8, DCC Cultural and Creative

Garden, No.98, Pingxin North Road, Shangmugu Community, Address.....:

Pinghu Street, Longgang District, Shenzhen, Guangdong

Applicant's name..... Hangzhou Meari Technology Co., Ltd.

Address....:: Building 4, Huiding Intelligent Innovation Center, No. 825, Ruguan

Road, Changhe Street, Binjiang District, Hangzhou, Zhejiang, China

Test specification....:

47CFR §1.1310

47CFR §2.1091 Standard.....:

KDB447498 D01 General RF Exposure Guidance v06

TRF Originator...... Shenzhen Global Test Service Co.,Ltd.

Master TRF...... Dated 2014-12

Shenzhen Global Test Service Co., Ltd. All rights reserved.

This publication may be reproduced in whole or in part for non-commercial purposes as long as the Shenzhen Global Test Service Co., Ltd. is acknowledged as copyright owner and source of the material. Shenzhen Global Test Service 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....: **Baby Monitor**

Trade Mark....:

Manufacturer...... Hangzhou Meari Technology Co., Ltd.

Model/Type reference....: Baby 6T

Listed Models: Baby 6S, Baby 6TM, Baby 6SM, Baby 2S, Baby 2T, Baby 2SM,

Baby 2TM, Speed 15S, Speed 15T, KABBCM1C1DA,

KABBCMADDCA, C1

Hardware Version: BABY6T-T3MB-GC1-REV2_1

Software Version.....: N/A

Rating...... DC 5.0V/1.0A by Adapter

Result.....: PASS

TEST REPORT

Test Report No. :	GTS20240806004-4-05	Sep.06, 2024
	G102024000004-4-00	Date of issue

Equipment under Test : Baby Monitor

Model /Type : Baby 6T

Listed model : Baby 6S, Baby 6TM, Baby 6SM, Baby 2S, Baby 2T, Baby 2SM,

Baby 2TM, Speed 15S, Speed 15T, KABBCM1C1DA,

KABBCMADDCA, C1

Applicant : Hangzhou Meari Technology Co., Ltd.

Address : Building 4, Huiding Intelligent Innovation Center, No. 825, Ruquan

Road, Changhe Street, Binjiang District, Hangzhou, Zhejiang, China

Manufacturer : Hangzhou Meari Technology Co., Ltd.

Address 4F of Building 1 and 2-4F of Building 2, No. 91 Chutian Road,

Xixing Street, Binjiang District, Hangzhou, Zhejiang, China

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

1.	SUMMARY	4
	1.1 EUT CONFIGURATION	
	1.2 PRODUCT DESCRIPTION	4
2.	TEST ENVIRONMENT	5
	2.1 Address of the test laboratory	5
	2.2 Test Facility	
	2.3 ENVIRONMENTAL CONDITIONS	
	2.4 STATEMENT OF THE MEASUREMENT UNCERTAINTY	
•	METHOD OF MEASUREMENT	c
Э.		
	3.1 APPLICABLE STANDARD	6
	3.2 REQUIREMENT	6
	3.3 LIMIT	
	3.4 MPE CALCULATION METHOD	
	3.5 Antenna Information	7
4.	CONDUCTED POWER RESULTS	8
_	MANUFACTURING TOLERANCE	٥
6.	MEASUREMENT RESULTS	10
	6.1 STANDALONE MPE EVALUATION	10
_		
/.	CONCLUSION	. 12

Report No.: GTS20240806004-4-05 Page 4 of 12

1. SUMMARY

1.1 EUT configuration

The following peripheral devices and interface cables were connected during the measurement:

• - supplied by the manufacturer

○ - supplied by the lab

1	Length (m):	1
	Shield :	1
	Detachable :	1

1.2 Product Description

Product Name	e Baby Monitor		
Trade Mark	N/A		
Model/Type reference	Baby 6T		
List Models	Baby 6S, Baby 6TM, Baby 6SM, Baby 2S, Baby 2T, Baby 2SM, Baby 2TM, Speed 15S, Speed 15T, KABBCM1C1DA, KABBCMADDCA, C1		
Model Declaration	PCB board, structure and internal of these model(s) are the same, Only the model name different, So no additional models were tested.		
Power supply:	DC 5.0V/1.0A by Adapter		
Sample ID	GTS20240806004-4-S0001-4#>S20240806004-4-S0001-5#		
Bluetooth			
Operation frequency	2402-2480MHz		
Channel Number	40 channels for Bluetooth (DTS)		
Channel Spacing 2MHz for Bluetooth (DTS)			
Modulation Type	GFSK for Bluetooth (DTS)		
WIFI(2.4G Band)			
Frequency Range	2412MHz ~ 2462MHz		
Channel Spacing	5MHz		
Channel Number	11 Channel for 20MHz bandwidth(2412~2462MHz)		
Modulation Type	802.11b: DSSS; 802.11g/n: OFDM; 802.11ax: OFDMA		
Antenna Description	Metal Antenna, 2.63dBi(Max.) for 2.4G Band		
SRD			
Frequency Range	905-925MHz		
Channel Number	11Channel		
Channel Spacing	2MHz		
Modulation Type	OFDM		
Antenna Description	FPC Antenna,-1.7 dBi(Max.)		

Report No.: GTS20240806004-4-05 Page 5 of 12

2. TEST ENVIRONMENT

2.1 Address of the test laboratory

Shenzhen Global Test Service Co.,Ltd.

No.7-101 and 8A-104, Building 7 and 8, DCC Cultural and Creative Garden, No.98, Pingxin North Road, Shangmugu Community, Pinghu Street, Longgang District, Shenzhen, Guangdong

2.2 Test Facility

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

CNAS (No. CNAS L8169)

Shenzhen Global Test Service Co., Ltd. has been assessed and proved to be in compliance with CNAS-CL01 Accreditation Criteria for Testing and Calibration Laboratories (identical to ISO/IEC 17025: 2019 General Requirements) for the Competence of Testing and Calibration Laboratories.

A2LA (Certificate No. 4758.01)

Shenzhen Global Test Service Co., Ltd. has been assessed by the American Association for Laboratory Accreditation (A2LA). Certificate No. 4758.01.

Industry Canada Registration Number. is 24189.

FCC Designation Number is CN1234.

FCC Registered Test Site Number is165725.

2.3 Environmental conditions

During the measurement the environmental conditions were within the listed ranges:

Temperature:	15-35 ° C
Humidity:	30-60 %
_	
Atmospheric pressure:	950-1050mbar

2.4 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 Global Test Service 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 GTS laboratory is reported:

Test Items	Measurement Uncertainty	Notes
Transmitter power conducted	0.57 dB	(1)

This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2.

Report No.: GTS20240806004-4-05 Page 6 of 12

3. METHOD OF MEASUREMENT

3.1 Applicable Standard

According to §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

According to §1.1310 and §2.1091 RF exposure is calculated.

KDB447498 D01 General RF Exposure Guidance v06: Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies

3.2 Requirement

Systems operating under the provisions of FCC 47 CFR section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as mobile device whereby a distance of 0.2m normally can be maintained between the user and the device, and below RF Permissible Exposure limit shall comply with.

In accordance with KDB447498 D01 General RF Exposure Guidance v06 for Simultaneous transmission MPE test exclusion applies when the sum of the MPE ratios for all simultaneous transmitting antennas incorporated in a host device, based on the calculated/estimated, numerically modeled or measured field strengths or power density, is ≤ 1.0. The MPE ratio of each antenna is determined at the minimum test separation distance required by the operating configurations and exposure conditions of the host device, according to the ratio of field strengths or power density to MPE limit, at the test frequency. Either the maximum peak or spatially averaged results from measurements or numerical simulations may be used to determine the MPE ratios. Spatial averaging does not apply when MPE is estimated using simple calculations based on far-field planewave equivalent conditions. The antenna installation and operating requirements for the host device must meet the minimum test separation distances required by all antennas, in both standalone and simultaneous transmission operations, to satisfy compliance.

3.3 Limit

Limits for Maximum Permissible Exposure (MPE)/Controlled Exposure

Frequency Range(MHz)	Electric Field Strength(V/m)	Magnetic Field Strength(A/m)	Power Density (mW/cm²)	Averaging Time (minute)	
J ()	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	Electric Field	Magnetic Field	Power Density	Averaging Time		
Range(MHz)	Strength(V/m)	Strength(A/m)	(mW/cm²)	(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

Report No.: GTS20240806004-4-05 Page 7 of 12

3.4 MPE Calculation Method

Predication of MPE limit at a given distance Equation from page 18 of OET Bulletin 65, Edition 97-01

S=PG/4πR²

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

As declared by the Applicant, the EUT transmits with the maximum soure-baed Duty Cycle of 100%-see the User manual, and the EUT is a wireless device used in a mobile application, at least 20 cm from any body part of the user or nearby persons; from the maximum EUT RF output power, the minimum mobile separation distance, r =20cm, as well as the gain of the used antenna is 2.63dBi&-1.7dBi for WLAN&SRD, and the power drift from Turn-up Procedure provide by manufacturer as following states, the RF power density can be obtained.

3.5 Antenna Information

Baby 6T can only use antennas certificated as follows provided by manufacturer;

Internal Identification	Antenna Identification in Internal photos	Antenna type and antenna number	Operate frequency band	Maximum antenna gain
Antenna 1	BLE&WLAN ANT	Metal antenna	2400 – 2500MHz	2.63dBi(Max.)
Antenna 2	SRD ANT	FPC antenna	900 – 950MHz	-1.7dBi(Max.)

Report No.: GTS20240806004-4-05 Page 8 of 12

4. Conducted Power Results

Mode	Channel	Frequency (MHz)	Peak Power (dBm)
	0	2402	13.74
GFSK(BT LE)	19	2440	13.91
	39	2480	13.62

2.4GWLAN

Mode	Channel	Frequency (MHz)	Peak Conducted Output Power (dBm)
	01	2412	17.56
802.11b	06	2437	17.50
	11	2462	17.94
	01	2412	19.69
802.11g	06	2437	19.55
	11	2462	19.53
802.11n(HT20)	01	2412	19.33
	06	2437	19.19
	11	2462	19.42
	01	2412	19.17
802.11ax(HT20)	06	2437	19.07
	11	2462	19.28

SRD

V.12							
Mode	Channel	Frequency (MHz)	Peak Conducted Output Power (dBm)				
	00	905	29.06				
OFDM	05	915	28.60				
	10	925	29.79				

5. Manufacturing Tolerance

Bluetooth

GFSK BT LE (Peak)							
Channel	Channel 0	Channel 19	Channel 39				
Target (dBm)	13.0	13.0	13.0				
Tolerance ±(dB)	1.0	1.0	1.0				

2.4GWLAN

IEEE 000 4								
IEEE 802.11b (Peak)								
Channel 01 Channel 06		Channel 11						
17.0	17.0	17.0						
1.0	1.0	1.0						
IEEE 802.1	11g (Peak)							
Channel 01	Channel 06	Channel 11						
19.0	19.0	19.0						
1.0 1.0		1.0						
IEEE 802.11n HT20 (Peak)								
Channel 01	Channel 06	Channel 11						
19.0	19.0	19.0						
1.0	1.0	1.0						
IEEE 802.11ax	(HT20 (Peak)							
Channel 03	Channel 06	Channel 09						
19.0	19.0	19.0						
1.0	1.0	1.0						
	Channel 01 17.0 1.0 IEEE 802.1 Channel 01 19.0 1.0 IEEE 802.11n Channel 01 19.0 1.0 IEEE 802.11ax Channel 03 19.0	Channel 01 Channel 06 17.0 17.0 1.0 1.0 IEEE 802.11g (Peak) Channel 01 Channel 06 19.0 19.0 1.0 1.0 IEEE 802.11n HT20 (Peak) Channel 01 Channel 06 19.0 19.0 1.0 19.0 1.0 19.0 Channel 01 Channel 06 19.0 19.0 1.0 1.0 IEEE 802.11ax HT20 (Peak) Channel 03 Channel 06 19.0 19.0						

SRD

OFDM (Peak)									
Channel	Channel 00	Channel 05	Channel 10						
Target (dBm)	29.0	28.0	29.0						
Tolerance ±(dB)	1.0	1.0	1.0						

Report No.: GTS20240806004-4-05 Page 10 of 12

6. Measurement Results

6.1 Standalone MPE Evaluation

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 =20cm, as well as the gain of the used antenna refer to antenna information, the RF power density can be obtained.

Bluetooth

	Output	power	Antenna	Antenna	MPE	MPE
Modulation Type	dDree me\A/	Gain	Gain		Limits	
	dBm	mW	(dBi)	(linear)	(mW/cm²)	(mW/cm ²)
GFSK(BT LE)	14.0	25.1189	2.63	1.8323	0.0092	1.0000

2.4GWLAN

	Output	power	Antenna	Antenna	MPE	MPE
Modulation Type	dBm	mW	Gain	Gain	(mW/cm ²)	Limits
	abiii	11100	(dBi)	(linear)	(IIIVV/CIII)	(mW/cm ²)
802.11b	18.00	63.0957	2.63	1.8323	0.0230	1.0000
802.11g	20.00	100.0000	2.63	1.8323	0.0365	1.0000
802.11n(HT20)	20.00	100.0000	2.63	1.8323	0.0365	1.0000
802.11ax(HT20)	20.00	100.0000	2.63	1.8323	0.0365	1.0000

SRD

	Output	power	Antenna	Antenna	MPE	MPE
Modulation Type	dBm	mW	Gain	Gain		Limits
			(dBi)	(linear)	(mW/cm ²)	(mW/cm ²)
OFDM	30.00	1000.000	-1.7	0.6761	0.1345	0.6033

Remark:

- 1. Output power including tune-up tolerance;
- ${\it 2. MPE evaluate \ distance \ is \ 20cm \ from \ user \ manual \ provide \ by \ manufacturer;}$

Report No.: GTS20240806004-4-05 Page 11 of 12

6.2 Simultaneous Transmission MPE

The sample support one SRD and WLAN modular and one SRD antenna, and one WLAN antennas, Need consider simultaneous transmission;

According to KDB447498 D01 General RF Exposure Guidance v06 for Transmitters used in mobile exposure conditions for simultaneous transmission operations;

 Σ of MPE ratios ≤ 1.0

6.2.1 Summary simultaneous transmission results

Maximum Simultaneous transmission MPE Ratios for Bluetooth, 2.4GWLAN, SRD.

Maximum MPE ratio (Bluetooth)	Maximum MPE ratio (2.4GWLAN)	Maximum MPE ratio SRD	∑MPE ratios	Limit	Results	
0.0092	0.0365	0.1345	0.1802	1.0	PASS	

Report No.: GTS20240806004-4-05 Page 12 of 12

7. Conclusion

End of Report	
and SAR Exclusion Threshold per KDB447498 D01 General RF Exposure Guidance v06, No SAR is required	d.
The measurement results comply with the FCC Limit per 47 CFR 2.1091 for the uncontrolled RF Exposure	