# FCC Test Report

| | |
|---|---|
| **Application No.:** | DNT2412100089R5468-07399 |
| **Applicant:** | Foshan Dapeng Zhanchi Trading Co., Ltd |
| **Address of Applicant:** | Room 868, Building 2, Guangfo E-commerce Mall, No. 18 Nansi Road, Guicheng Street, Nanhai District, Foshan City，Guangdong Province, China |
| **EUT Description:** | Baby Swing |
| **Model No.:** | 8002 |
| **FCC ID:** | 2BMT8-8002 |
| **Power Supply:** | DC 6V From “D” Battery; DC 5V From Adapter Input AC 100-240V,50/60Hz |
| **Trade Mark:** | Oneya Baby |
| **Standards:** | 47 CFR FCC Part 2, Subpart J<br>47 CFR Part 15, Subpart C<br>ANSI C63.10: 2013 |
| **Date of Receipt:** | 2024/12/10 |
| **Date of Test:** | 2024/12/10 to 2024/12/18 |
| **Date of Issue:** | 2024/12/20 |
| **Test Result:** | **PASS** |

**Prepared By:** Wayne.Lin (Testing Engineer)

**Reviewed By:** Pencils.Chen (Project Engineer)

**Approved By:** Yeise Chen (Manager)

Note: If there is any objection to the results in this report, please submit a written inquiry to the company within 15 days from the date of receiving the report. The test report is effective only with both signature and specialized stamp, and is issued by the company in accordance with the requirements of the "Conditions of Issuance of Test Reports" printed in the attached page. Unless otherwise stated, the results presented in this report only apply to the samples tested this time. Partial reproduction of this report is not allowed unless approved by the company in writing.

**Dongguan DN Testing Co., Ltd.**

Add: No. 1, West Fourth Street, Xingfa South Road, Wusha Community, Chang 'an Town, Dongguan City, Guangdong P.R.China

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**Report Revise Record**

| Report Version | Revise Time | Issued Date | Valid Version | Notes |
|---|---|---|---|---|
| V1.0 | / | Dec.20, 2024 | Valid | Original Report |

# 1 Test Summary

| Test Item | Test Requirement | Test Method | Test Result | Result |
|---|---|---|---|---|
| Antenna Requirement | 15.203/247(b) | -- | Clause 3.1 | PASS |
| 20dB Emission Bandwidth | 15.247 (a)(1) | ANSI C63.10: 2013 | Clause 3.2 | PASS |
| Conducted Peak Output Power | 15.247 (b)(1) | ANSI C63.10: 2013 | Clause 3.3 | PASS |
| Carrier Frequencies Separation | 15.247 (a)(1) | ANSI C63.10: 2013 | Clause 3.4 | PASS |
| Dwell Time | 15.247 (a)(1) | ANSI C63.10: 2013 | Clause 3.5 | PASS |
| Hopping Channel Number | 15.247 (a)(1) | ANSI C63.10: 2013 | Clause 3.6 | PASS |
| Band-edge for RF Conducted Emissions | 15.247(d) | ANSI C63.10: 2013 | Clause 3.7 | PASS |
| RF Conducted Spurious Emissions | 15.247(d) | ANSI C63.10: 2013 | Clause 3.8 | PASS |
| Radiated Spurious emissions | 15.247(d); 15.205/15.209 | ANSI C63.10: 2013 | Clause 3.9 | PASS |
| Restricted bands around fundamental frequency (Radiated Emission) | 15.247(d); 15.205/15.209 | ANSI C63.10: 2013 | Clause 3.10 | PASS |
| AC Power Line Conducted Emission | 15.207 | ANSI C63.10: 2013 | Clause 3.11 | PASS |

Note:
1. “N/A” denotes test is not applicable in this test report.

# Contents


1 Test Summary ..... 3
2 General Information ..... 5
2.1 Test Location ..... 5
2.2 General Description of EUT ..... 6
2.3 Channel List ..... 7
2.4 Test Environment and Mode ..... 8
2.5 Power Setting of Test Software ..... 9
2.6 Description of Support Units ..... 9
2.7 Test Facility ..... 9
2.8 Measurement Uncertainty (95% confidence levels, k=2) ..... 10
2.9 Equipment List ..... 11
2.10 Assistant equipment used for test ..... 12
3 Test results and Measurement Data ..... 13
3.1 Antenna Requirement ..... 13
3.2 20dB Emission Bandwidth ..... 14
3.3 Conducted Output Power ..... 15
3.4 Carrier Frequencies Separationy ..... 16
3.5 Dwell Time ..... 17
3.6 Hopping Channel Number ..... 18
3.7 Band-edge for RF Conducted Emissions ..... 19
3.8 RF Conducted Spurious Emissions ..... 20
3.9 Radiated Spurious Emissions ..... 21
3.10 Restricted bands around fundamental frequency ..... 29
3.11 AC Power Line Conducted Emissions ..... 33
4 Appendix ..... 36
Appendix A: 20dB Emission Bandwidth ..... 36
Appendix B: Maximum conducted output power ..... 40
Appendix C: Carrier frequency separation ..... 44
Appendix D: Dwell Time ..... 46
Appendix F: Number of hopping channels ..... 47
Appendix F: Band edge measurements ..... 52
Appendix F: Conducted Spurious Emission ..... 53

# 2 General Information

## 2.1 Test Location

| | |
|---|---|
| Company: | Dongguan DN Testing Co., Ltd |
| Address: | No. 1, West Fourth Street, South Xinfa Road, Wusha Liwu, Chang ' an Town, Dongguan City, Guangdong P.R.China |
| Test engineer: | Wayne Lin |

## 2.2 General Description of EUT

| | |
|---|---|
| Manufacturer: | Bebe Kingdom Plastic Products Co.,Ltd |
| Address of Manufacturer: | No.5, ZhaoXing Street, KuiXing Avenue, Zhaolong Commumity, Xiaolan Town, Zhongshan City, Guangdong Province, China |
| Test EUT Description: | Baby Swing |
| Model No.: | 8002 |
| Additional Model(s): | / |
| Chip Type: | BP26813 |
| Serial number: | PR2412100089R5468 |
| Power Supply: | DC 6V From “D” Battery; DC 5V From Adapter Input AC 100-240V,50/60Hz |
| Trade Mark: | Oneya Baby |
| Hardware Version: | V1.0 |
| Software Version: | V1.0 |
| Operation Frequency: | 2402 MHz to 2480 MHz |
| Modulation Technique: | Frequency Hopping Spread Spectrum(FHSS) |
| Type of Modulation: | GFSK,π/4-DQPSK,8DPSK |
| Sample Type: | ☒ Portable Device, ☐ Module,☐ Mobile Device |
| Antenna Type: | ☐ External, ☒ Integrated |
| Antenna Ports: | ☒ Ant 1, ☐ Ant 2, ☐ Ant 3 |
| Antenna Gain*: | ☒ Provided by applicant |
| | -0.58dBi |
| RF Cable*: | ☒ Provided by applicant |
| | 0.5dB(0.6~1GHz); 0.8dB(1.4~2GHz); 1.0dB(2.1~2.7GHz); 1.5dB(3~4GHz); 1.8dB(4.4~6GHz); |

Remark:

*Since the above data and/or information is provided by the applicant relevant results or conclusions of this report are only made for these data and/or information , DNT is not responsible for the authenticity, integrity and results of the data and information and/or the validity of the conclusion.

## 2.3 Channel List

| Operation Frequency of each channel | | | | | | | |
|---|---|---|---|---|---|---|---|
| Channel | Frequency | Channel | Frequency | Channel | Frequency | Channel | Frequency |
| 0 | 2402MHz | 20 | 2422MHz | 40 | 2442MHz | 60 | 2462MHz |
| 1 | 2403MHz | 21 | 2423MHz | 41 | 2443MHz | 61 | 2463MHz |
| 2 | 2404MHz | 22 | 2424MHz | 42 | 2444MHz | 62 | 2464MHz |
| 3 | 2405MHz | 23 | 2425MHz | 43 | 2445MHz | 63 | 2465MHz |
| 4 | 2406MHz | 24 | 2426MHz | 44 | 2446MHz | 64 | 2466MHz |
| 5 | 2407MHz | 25 | 2427MHz | 45 | 2447MHz | 65 | 2467MHz |
| 6 | 2408MHz | 26 | 2428MHz | 46 | 2448MHz | 66 | 2468MHz |
| 7 | 2409MHz | 27 | 2429MHz | 47 | 2449MHz | 67 | 2469MHz |
| 8 | 2410MHz | 28 | 2430MHz | 48 | 2450MHz | 68 | 2470MHz |
| 9 | 2411MHz | 29 | 2431MHz | 49 | 2451MHz | 69 | 2471MHz |
| 10 | 2412MHz | 30 | 2432MHz | 50 | 2452MHz | 70 | 2472MHz |
| 11 | 2413MHz | 31 | 2433MHz | 51 | 2453MHz | 71 | 2473MHz |
| 12 | 2414MHz | 32 | 2434MHz | 52 | 2454MHz | 72 | 2474MHz |
| 13 | 2415MHz | 33 | 2435MHz | 53 | 2455MHz | 73 | 2475MHz |
| 14 | 2416MHz | 34 | 2436MHz | 54 | 2456MHz | 74 | 2476MHz |
| 15 | 2417MHz | 35 | 2437MHz | 55 | 2457MHz | 75 | 2477MHz |
| 16 | 2418MHz | 36 | 2438MHz | 56 | 2458MHz | 76 | 2478MHz |
| 17 | 2419MHz | 37 | 2439MHz | 57 | 2459MHz | 77 | 2479MHz |
| 18 | 2420MHz | 38 | 2440MHz | 58 | 2460MHz | 78 | 2480MHz |
| 19 | 2421MHz | 39 | 2441MHz | 59 | 2461MHz | | |

Remark:
In section 15.31(m), regards to the operating frequency range over 10 MHz, the Lowest frequency, the middle frequency, and the highest frequency of channel were selected to perform the test, and the selected channel see below:

| Channel | Frequency |
|---|---|
| The Lowest channel | 2402MHz |
| The Middle channel | 2441MHz |
| The Highest channel | 2480MHz |

## 2.4 5Test Environment and Mode

| **Operating Environment:** | |
|---|---|
| Temperature: | 20~25.0 ˚C |
| Humidity: | 45~56 % RH |
| Atmospheric Pressure: | 101.0~101.30 KPa |
| **Test mode:** | |
| Transmitting mode: | Keep the EUT in transmitting mode with all kind of modulation and all kind of data rate. |

## 2.5 Power Setting of Test Software

| Software Name | FCC_assist_1.0.2.2 | | |
|---|---|---|---|
| Frequency(MHz) | 2402 | 2441 | 2480 |
| GFSK Setting | 10 | 10 | 10 |
| π/4-DQPSK Setting | 10 | 10 | 10 |
| 8DPSK | 10 | 10 | 10 |

## 2.6 Description of Support Units

The EUT has been tested independent unit.

## 2.7 Test Facility

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

**Lab A:**

**• FCC, USA**

Designation Number: CN1348

**• A2LA (Certificate No. 7050.01)**

DONGGUAN DN TESTING CO., LTD. is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 7050.01.

**• Innovation, Science and Economic Development Canada**

DONGGUAN DN TESTING CO., LTD. EMC Laboratory has been recognized by ISED as an accredited testing laboratory. CAB identifier is CN0149.

IC#: 30755.

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## 2.8 Measurement Uncertainty (95% confidence levels, k=2)

| No. | Item | Measurement Uncertainty |
|---|---|---|
| 1 | 20dB Emission Bandwidth | ±0.0196% |
| 2 | Carrier Frequency Separation | ±1.9% |
| 3 | Number of Hopping Channel | ±1.9% |
| 4 | Time of Occupancy | ±0.028% |
| 5 | Max Peak Conducted Output Power | ±0.743 dB |
| 6 | Band-edge Spurious Emission | ±1.328 dB |
| 7 | Conducted RF Spurious Emission | 9KHz-1GHz:±0.746dB<br>1GHz-26GHz:±1.328dB |

| No. | Item | Measurement Uncertainty |
|---|---|---|
| 1 | Conduction Emission | ± 3.0dB (150kHz to 30MHz) |
| 2 | Radiated Emission | ± 4.8dB (Below 1GHz) |
| | | ± 4.8dB (1GHz to 6GHz) |
| | | ± 4.5dB (6GHz to 18GHz) |
| | | ± 5.02dB (Above 18GHz) |

## 2.9 Equipment List

| For Connect EUT Antenna Terminal Test | | | | | |
|---|---|---|---|---|---|
| Description | Manufacturer | Model | Serial Number | Cal date | Due date |
| Signal Generator | Keysight | N5181A-6G | MY48180415 | 2024-10-23 | 2025-10-22 |
| Signal Generator | Keysight | N5182B | MY57300617 | 2024-10-23 | 2025-10-22 |
| Power supply | Keysight | E3640A | ZB2022656 | 2024-10-23 | 2025-10-22 |
| Radio Communication Tester | R&S | CMW500 | 105082 | 2024-10-23 | 2025-10-22 |
| Spectrum Analyzer | Aglient | N9010A | MY52221458 | 2024-10-23 | 2025-10-22 |
| BT/WIFI Test Software | Tonscend | JS1120 V3.1.83 | NA | NA | NA |
| RF Control Unit | Tonscend | JS0806-2 | 22F8060581 | NA | NA |
| Power Sensor | Anritsu | ML2495A | 2129005 | 2024-10-23 | 2025-10-22 |
| Pulse Power Sensor | Anritsu | MA2411B | 1911397 | 2024-10-23 | 2025-10-22 |
| temperature and humidity box | SCOTEK | SCD-C40-80PRO | 6866682020008 | 2024-10-23 | 2025-10-22 |

| Test Equipment for Conducted Emission | | | | | |
|---|---|---|---|---|---|
| Description | Manufacturer | Model | Serial Number | Cal Date | Due Date |
| Receiver | R&S | ESCI3 | 101152 | 2024-10-23 | 2025-10-22 |
| LISN | R&S | ENV216 | 102874 | 2024-10-23 | 2025-10-22 |
| ISN | R&S | ENY81-CA6 | 1309.8590.03 | 2024-10-23 | 2025-10-22 |

| Test Equipment for Radiated Emission(30MHz-1000MHz) | | | | | |
|---|---|---|---|---|---|
| Description | Manufacturer | Model | Serial Number | Cal Date | Due Date |
| Receiver | R&S | ESR7 | 102497 | 2024-10-23 | 2025-10-22 |
| Test Software | ETS-LINDGREN | TiLE-FULL | NA | NA | NA |
| RF Cable | ETS-LINDGREN | RFC-NMS-100-NMS-350-IN | NA | 2024-10-23 | 2025-10-22 |
| Log periodic antenna | ETS-LINDGREN | VULB 9168 | 01475 | 2022-11-28 | 2025-11-27 |
| Pre-amplifier | Schwarzbeck | BBV9743B | 00423 | 2024-10-23 | 2025-10-22 |

| Test Equipment for Radiated Emission(Above 1000MHz) | | | | | |
|---|---|---|---|---|---|
| Description | Manufacturer | Model | Serial Number | Cal Date | Due Date |
| Frequency analyser | Keysight | N9010A | MY52221458 | 2024-10-23 | 2025-10-22 |
| RF Cable | ETS-LINDGREN | RFC-NMS-100-NMS-350-IN | NA | 2024-10-23 | 2025-10-22 |
| Horn Antenna | ETS-LINDGREN | 3117 | 00252567 | 2022-11-28 | 2025-11-27 |
| Double ridged waveguide antenna | ETS-LINDGREN | 3116C | 00251780 | 2022-11-28 | 2025-11-27 |
| Test Software | ETS-LINDGREN | TiLE-FULL | NA | NA | NA |
| Pre-amplifier | ETS-LINDGREN | 3117-PA | 252567 | 2024-10-23 | 2025-10-22 |
| Pre-amplifier | ETS-LINDGREN | 3116C-PA | 251780 | 2024-10-23 | 2025-10-22 |

## 2.10 Assistant equipment used for test

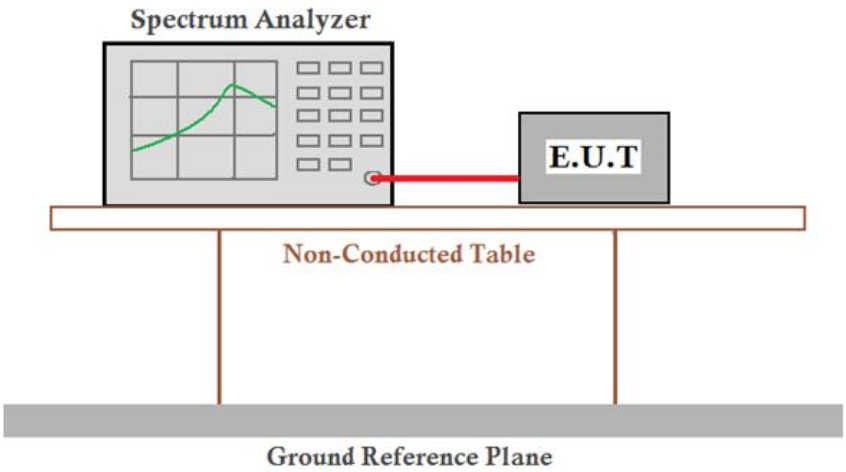
| Code | Equipment | Manufacturer | Model No. | Equipment No. |
|---|---|---|---|---|
| 1 | Computer | acer | N22C8 | EMC notebook01 |
| 2 | Adapter | Zhongshan FuDuo | DK30A-050-1000-SU | / |

# 3 Test results and Measurement Data

## 3.1 Antenna Requirement

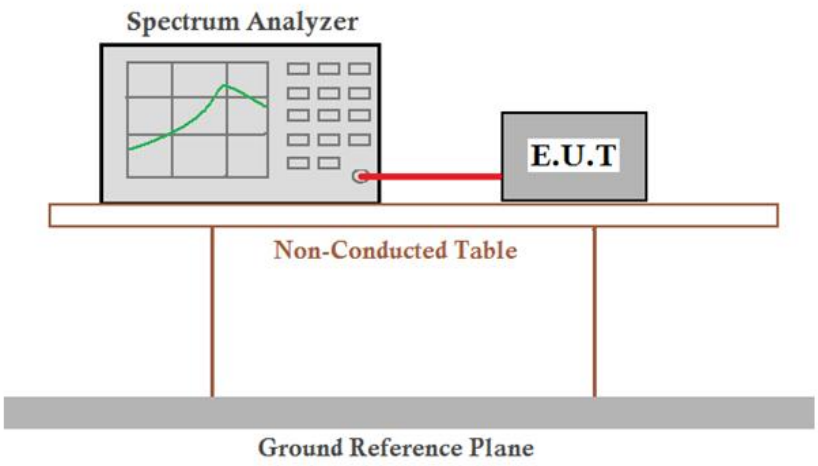
| **Standard requirement:** | 47 CFR Part 15C Section 15.203 /247(c) |
|---|---|
| 15.203 requirement:<br>An intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator, the manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited.<br>15.247(b) (4) requirement:<br>The conducted output power limit specified in paragraph (b) of this section is based on the use of antennas with directional gains that do not exceed 6 dBi. Except as shown in paragraph (c) of this section, if transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced below the stated values in paragraphs (b)(1), (b)(2), and (b)(3) of this section, as appropriate, by the amount in dB that the directional gain of the antenna exceeds 6 dBi. | |
| The antenna is integrated on the main PCB and no consideration of replacement. The best case gain of the antenna is -0.58dBi. | |

## 3.2 20dB Emission Bandwidth

| | |
|---|---|
| Test Requirement: | 47 CFR Part 15C Section 15.247 (a)(1) |
| Test Method: | ANSI C63.10: 2013 Section 7.8.7 |
| Test Setup: |  |
| Instruments Used: | Refer to section 2.9 for details |
| Exploratory Test Mode: | Non-hopping transmitting with all kind of modulation and all kind of data type. |
| Final Test Mode: | Through Pre-scan, find the worst case of all modulation type. |
| Limit: | NA |
| Test Results: | Pass |

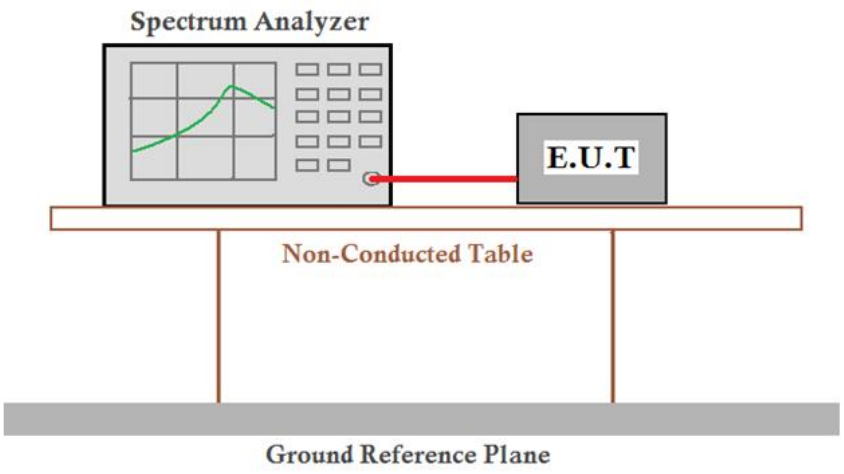
The detailed test data see: **Appendix A**

## 3.3 Conducted Output Power

| | |
|---|---|
| Test Requirement: | 47 CFR Part 15C Section 15.247 (b)(1) |
| Test Method: | ANSI C63.10: 2013 Section 7.8.5 |
| Test Setup: |  |
| Test Instruments: | Refer to section 2.9 for details |
| Exploratory Test Mode: | Non-hopping transmitting with all kind of modulation and all kind of data type. |
| Final Test Mode: | Through Pre-scan, find the worst case of all modulation type. |
| Limit: | (20.97dBm) 125mW |
| Test Results: | Pass |

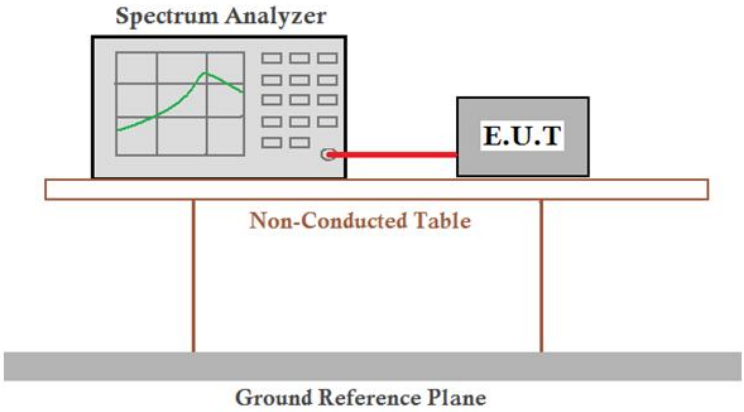
The detailed test data see: **Appendix B**

## 3.4 Carrier Frequencies Separationy

| | |
|---|---|
| Test Requirement: | 47 CFR Part 15C Section 15.247 (a)(1) |
| Test Method: | ANSI C63.10: 2013 Section 7.8.2 |
| Test Setup: |  |
| Test Instruments: | Refer to section 2.9 for details |
| Exploratory Test Mode: | Hopping transmitting with all kind of modulation and all kind of data type. |
| Final Test Mode: | Through Pre-scan, find the worst case of all modulation type. |
| Limit: | 2/3 of the 20dB bandwidth |
| | Remark: the transmission power is less than 0.125W. |
| Test Results: | Pass |

The detailed test data see: **Appendix C**

## 3.5 Dwell Time

| | |
|---|---|
| Test Requirement: | 47 CFR Part 15C Section 15.247 (a)(1) |
| Test Method: | ANSI C63.10: 2013 Section 7.8.4 |
| Test Setup: |  |
| Instruments Used: | Refer to section 2.9 for details |
| Test Mode: | Hopping transmitting with all kind of modulation and all kind of data type. |
| Limit: | 0.4 Second |
| Test Results: | Pass |

The detailed test data see: **Appendix D**