## Test Report

|  | No.: AJT240506082E-2 |
| :--- | :--- |
| Applicant Name: | SHANTOU CHENGHAI DISTRICT SUMATE TOYS FACTORY |
| Applicant Address: | 6TH FLOOR, NO. 3, WEST ZHUZHOU ROAD, SHANGDAI INDUSTRIAL |
|  | ZONE, CHENGHUA STREET, CHENGHAI DISTRICT, SHANTOU CITY, |
|  | GUANGDONG PROVINCE, CHINA |
| Manufacturer: | SHANTOU CHENGHAI DISTRICT SUMATE TOYS FACTORY |
| Manufacturer Address: | 6TH FLOOR, NO. 3, WEST ZHUZHOU ROAD, SHANGDAI INDUSTRIAL |
|  | ZONE, CHENGHUA STREET, CHENGHAI DISTRICT, SHANTOU CITY, |
|  | GUANGDONG PROVINCE, CHINA |

The following samples were submitted and identified by/on behalf of the client as:

Sample Description:
Model No.:
FCC ID:

## TOY CAR SERIES

1209
2BHK6-1209
1406, 2801, 2802, 2803, 2804, 2805, 2806, 2807, 2808, 2809, 2810, 2811, 2812, 2813, 2814, 2815, 2816, 2817, 2818, 2819, 2820, 2821, 2822, 2823, 2824, 2825, 2826, 1601, 1602, 1603, 1604, 1605, 1606, 1607, 1608, 1609, 1610, 1611, 1612, 1613, 1614, 1615, 1616, 1617, 1618, 1619, 1620, 1621, 1622, 1623, 1624, 1625, 1626, 1401, 1402, 1403, 1405, 1406, 1407, 1408, 1409, 1410, 1411, 1412, 1413, 1415, 1416, 1417, 1418, 1419, 1420, 1421, 1422, 1423, 1424, 1425, 1201, 1202, 1203, 1205, 1206, 1207, 1208, 1209, 1210, 1211, 1212, 1213, 1215, 1216, 1217, 1218, 1219, 1220, 1221, 1222, 1223, 1224, 1225, 1001, 1002, 1003, 1004, 1005, 1006, 1007, 1008, 1009, 1010, 1011, 1012, 1013, 1014, 1015, 1016, 1017, 1018, 1019, 1020, 1021, 1022, 1023, 1024, 1025, 1026, NY91201, NY91202, NY91203, NY91204, NY91205, NY91601, NY91602, NY91603, NY91604, NY91605
06 May, 2024
14 May, 2024

Tests conducted: For compliance with application, refer to attached page(s) for details.

| Assess standard used: | Conclusion |
| :--- | :---: |
| CFR47 FCC Part 2: Section 2.1093 |  |
| CFR47 FCC Part 1: Section 1.1310 | PASS |
| FCC KDB Publication 447498 D01 v06 |  |



Reviewed by:
 Approved by: Pordro Position Technicat \$upervisor Date $\quad 2024-07-20$ This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Disagreement against this test report, if any, should be filed with to our company in writing within 15 days of receiving the report. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission.
AJT TESTING SERVICES LIMITED
Add: 1-2/F., No.1, Wenhua South Road, Chenghua Industrial Zone, Chenghai District, Shantou, Guangdong, China
Tel: 86-754-85860999 Fax: 86-754-86984098 Website: www.ajtesting.com Email: info@aitesting.com

## Test Report

No.: AJT240506082E-2

## 1 General Information

### 1.1 General Description of E.U.T.

| Product: | TOY CAR SERIES |
| :--- | :--- |
| Model(s): | 1209 |
| FCC ID: | 2BHK6-1209 |
| Power Supply Voltage | DC $6.0 \mathrm{~V}\left(\mathrm{AA}^{*} 4\right)$ |
| Operation Frequency: | $2402-2478 \mathrm{MHz}$ |
| Max. RF output power: | $67.56 \mathrm{~dB} \mu \mathrm{~V} / \mathrm{m@3m}$ |
| Type of Modulation: | GFSK |
| Antenna Type | Monopole Antenna |
| Antenna Gain: | 1.97 dBi |
| NOTE: <br> 1.The above EUT information is declared by manufacturer and for more detailed features <br> description, please refers to the manufacturer's specifications or user's manual. The laboratory is <br> not responsible for the accuracy of the information provided by manufacturer. <br> 2.Product models same are identical in the PCB layout, electrical circuit design and functions, The <br> differences are appearance color, exterior structure, and model name for commercial purpose. |  |

## 2 Test Summary

| Test Requirement | Result |
| :---: | :---: |
| CFR47 FCC Part 2: Section 2.1093 |  |
| CFR47 FCC Part 1: Section 1.1310 | PASS |
| FCC KDB Publication 447498 D01 v06 |  |

This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Disagreement against this test report, if any, should be filed with to our company in writing within 15 days of receiving the report. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission.
AJT TESTING SERVICES LIMITED
Add: 1-2/F., No.1, Wenhua South Road, Chenghua Industrial Zone, Chenghai District, Shantou, Guangdong, China
Tel: 86-754-85860999 Fax: 86-754-86984098 Website: www.ajtesting.com Email: info@ajtesting.com

## Test Report

## 3 FCC Radiofrequency Radiation Exposure Procedures

### 3.1 Requirements

According to $\S 15.247$ (i) and $\S 1.1307 \mathrm{~b}(1)$, 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 levels in excess of the Commission's guidelines. See KDB 447498 D01 General RF Exposure Guidance v05, section 4.3.1.
a. For 100 MHz to 6 GHz and test separation distances $\leqslant 50 \mathrm{~mm}$, the $1-\mathrm{g}$ and $10-\mathrm{g}$ SAR test exclusion thresholds are determined by the following:
[(max. power of channel, including tune-up tolerance, mW ) / (min. test separation distance, mm)]
$\left[V_{(G H z)}\right] \leqslant 3.0$ for $1-\mathrm{g}$ SAR and $\leqslant 7.5$ for $10-\mathrm{g}$ extremity SAR, where

- $f_{(G H z)}$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison
- The values 3.0 and 7.5 are referred to as numeric thresholds in step b) below. The test exclusions are applicable only when the minimum test separation distance is $\leq 50 \mathrm{~mm}$, and for transmission frequencies between 100 MHz and 6 GHz . When the minimum test separation distance is $<5 \mathrm{~mm}$, a distance of 5 mm is applied to determine SAR test exclusion.
b. For 100 MHz to 6 GHz and test separation distances $>50 \mathrm{~mm}$, the $1-\mathrm{g}$ and $10-\mathrm{g}$ SAR test exclusion thresholds are determined by the following:
(1) $\{[$ Power allowed at numeric threshold for 50 mm in step a$)]+[$ (test separation distance -50 $\mathrm{mm}) \cdot(\mathrm{f}(\mathrm{MHz}) / 150)]\} \mathrm{mW}$, for 100 MHz to 1500 MHz ;
(2) $\{[$ Power allowed at numeric threshold for 50 mm in step a$)]+[$ (test separation distance -50 $\mathrm{mm}) \cdot 10] \mathrm{mW}$, for $>1500 \mathrm{MHz}$ and $\leq 6 \mathrm{GHz}$.
c. For frequencies below 100 MHz , the following may be considered for SAR test exclusion
(1) For test separation distances $>50 \mathrm{~mm}$ and $<200 \mathrm{~mm}$, the power threshold at the corresponding test separation distance at 100 MHz in step b$)$ is multiplied by $[1+\log (100 / \mathrm{f}(\mathrm{MHz}))]$;
(2) For test separation distances $\leqslant 50 \mathrm{~mm}$, the power threshold determined by the equation in c)1) for 50 mm and 100 MHz is multiplied by $\frac{1}{2}$;
(3) SAR measurement procedures are not established below 100 MHz . When SAR test exclusion cannot be applied, a KDB inquiry is required to determine SAR evaluation requirements for any SAR test results below 100 MHz to be acceptable.

[^0]
## Test Report

No.: AJT240506082E-2

### 3.2 Method And Limit

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 levels in excess limit for maximum permissible exposure. In accordance with 47 CFR FCC Part 2 Subpart J, section 2.1091 this device has been defined as a mobile device whereby a distance of 0.2 m normally can be maintained between the user and the device.

Table A-Limits for Occupational / Controlled Exposure

| Frequency <br> Range $(\mathrm{MHz})$ | Electric Field <br> Strength (E) <br> $(\mathrm{V} / \mathrm{m})$ | Magnetic Field <br> Strength $(\mathrm{H})$ <br> $(\mathrm{A} / \mathrm{m})$ | Power Density $(\mathrm{S})$ <br> $\left(\mathrm{mW} / \mathrm{cm}^{2}\right)$ | Averaging Time <br> $\|\mathrm{E}\|^{2},\left.\mathrm{H}\right\|^{2}$ or S <br> $($ minutes $)$ |
| :---: | :---: | :---: | :---: | :---: |
| $0.3-3.0$ | 614 | 1.63 | $(100)^{\star}$ | 6 |
| $3.0-30$ | $1842 / \mathrm{f}$ | $4.89 / \mathrm{f}$ | $(900 / \mathrm{f})^{\star}$ | 6 |
| $30-300$ | 61.4 | 0.163 | 1.0 | 6 |
| $300-1500$ |  |  | $\mathrm{~F} / 300$ | 6 |
| $1500-100,000$ |  |  | 5 | 6 |

Table B-Limits for General Population / Uncontrolled Exposure

| Frequency Range <br> $(\mathrm{MHz})$ | Electric Field <br> Strength (E) $(\mathrm{V} / \mathrm{m})$ | Magnetic Field <br> Strength $(\mathrm{H})$ <br> $(\mathrm{A} / \mathrm{m})$ | Power Density $(\mathrm{S})$ <br> $\left(\mathrm{mW} / \mathrm{cm}^{2}\right)$ | Averaging Time <br> $\|\mathrm{E}\|^{2},\|\mathrm{H}\|^{2}$ or S <br> $($ minutes $)$ |
| :---: | :---: | :---: | :---: | :---: |
| $0.3-1.34$ | 614 | 1.63 | $(100)^{*}$ | 30 |
| $1.34-30$ | $824 / \mathrm{f}$ | $2.19 / \mathrm{f}$ | $(180 /)^{\star}$ | 30 |
| $30-300$ | 27.5 | 0.073 | 0.2 | 30 |
| $300-1500$ |  |  | $\mathrm{~F} / 1500$ | 30 |
| $1500-100,000$ |  |  | 1.0 | 30 |

Note: $\mathrm{f}=$ frequency in MHz; *Plane-wave equivalent power density
$S=\frac{\mathrm{P} \times \mathrm{G}}{4 \times \pi \times R^{2}}$
$\mathrm{S}=$ power density (in appropriate units, e.g. mW/cm2)
$\mathrm{P}=$ output power to the antenna (in appropriate units, e.g., mW).
$G=$ power gain of the antenna in the direction of interest relative to an isotropic radiator, the power gain factor, is normally numeric gain.
$R=$ distance to the center of radiation of the antenna (appropriate units, e.g., cm)

This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Disagreement against this test report, if any, should be filed with to our company in writing within 15 days of receiving the report. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission.
AJT TESTING SERVICES LIMITED
Add: 1-2/F., No.1, Wenhua South Road, Chenghua Industrial Zone, Chenghai District, Shantou, Guangdong, China
Tel: 86-754-85860999 Fax: 86-754-86984098 Website: www.ajtesting.com Email: info@ajtesting.com

## Test Report

### 3.3 Measurement and Calculation

| Mode | Channel Frequency <br> $(\mathrm{MHz})$ | Field Strength <br> $(\mathrm{dB} \mu \mathrm{V} / \mathrm{m@3m})$ | Max Output Power <br> $(\mathrm{mW})$ | Calculation Value $^{\mathrm{a}}$ | Threshold <br> Value |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SRD | 2478 | 67.56 | 0.002 | 0.0005 | 3.0 |

Note:
a. Calculation Value $=[(\max$. power of channel, mW$) /$ (min. test separation distance, $m m)]\left[{ } \mathrm{Vf}_{(\mathrm{GHz})}\right]$ So Calculation Value $=0.002 / 5^{*} \sqrt{2} .478=0.0005$
b. Max Output Power(dBm)=Field Strength+20log(Test distance)-104.7
$P(m W)=10^{\wedge(P(d B m) / 10)}$

According to KDB447498 D01 V06, threshold at which no SAR required is S3.0 for 1-g SAR, separation distance is 5 mm , and no simultaneous SAR measurement is required.

END OF TEST REPORT

This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Disagreement against this test report, if any, should be filed with to our company in writing within 15 days of receiving the report. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission.
AJT TESTING SERVICES LIMITED
Add: 1-2/F., No.1, Wenhua South Road, Chenghua Industrial Zone, Chenghai District, Shantou, Guangdong, China
Tel: 86-754-85860999 Fax: 86-754-86984098 Website: www.ajtesting.com Email: info@ajtesting.com

$$
\text { Page } 5 \text { of } 5
$$


[^0]:    This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Disagreement against this test report, if any, should be filed with to our company in writing within 15 days of receiving the report. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission.
    AJT TESTING SERVICES LIMITED
    Add: 1-2/F., No.1, Wenhua South Road, Chenghua Industrial Zone, Chenghai District, Shantou, Guangdong, China
    Tel: 86-754-85860999 Fax: 86-754-86984098 Website: www.ajtesting.com Email: info@ajtesting.com

