TCT 通测检测 TESTING CENTRE TECHNOLOGY

# TEST REPORT

| | |
|---|---|
| **FCC ID. ..... :** | RSN-F4HULTRA |
| **Test Report No..... :** | TCT250103E016 |
| **Date of issue..... :** | Jan. 22, 2025 |
| **Testing laboratory ..... :** | SHENZHEN TONGCE TESTING LAB |
| **Testing location/ address:** | 2101 & 2201, Zhenchang Factory Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China |
| **Applicant's name..... :** | Cellphone-Mate Inc. dba SureCall |
| **Address..... :** | 48346 Milmont Drive Fremont California 94538 United States |
| **Manufacturer's name ... :** | Cellphone-Mate Inc. dba SureCall |
| **Address..... :** | 48346 Milmont Drive Fremont California 94538 United States |
| **Standard(s) ..... :** | FCC Part §1.1310 |
| **Product Name..... :** | Broadband Consumer Signal Booster |
| **Trade Mark ..... :** | Surecall |
| **Model/Type reference..... :** | Fusion4Home Ultra |
| **Rating(s)..... :** | Adapter Information:<br>MODEL: GME36A-120300FDS<br>INPUT: AC 100-240V, 50/60Hz, 1.2A<br>OUTPUT: DC 12.0V, 3.0A, 36.0W |
| **Date of receipt of test item ..... :** | Jan. 03, 2025 |
| **Date (s) of performance of test..... :** | Jan. 03, 2025 ~ Jan. 22, 2025 |
| **Tested by (+signature) ... :** | Brews XU |
| **Check by (+signature).... :** | Beryl ZHAO |
| **Approved by (+signature):** | Tomsin |

**General disclaimer:**

This report shall not be reproduced except in full, without the written approval of SHENZHEN TONGCE TESTING LAB. This document may be altered or revised by SHENZHEN TONGCE TESTING LAB personnel only, and shall be noted in the revision section of the document. The test results in the report only apply to the tested sample.

# Table of Contents




Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

# 1. General Product Information

## 1.1. EUT description

| | |
|---|---|
| **Product Name.....:** | Broadband Consumer Signal Booster |
| **Model/Type reference.....:** | Fusion4Home Ultra |
| **Sample Number.....:** | TCT250103E015-0101 |
| **Operation Frequency.....:** | PCS<br>Uplink: 1850MHz - 1915MHz, Downlink: 1930MHz - 1995MHz<br>AWS<br>Uplink: 1710MHz - 1755MHz, Downlink: 2110MHz - 2155MHz<br>Cellular<br>Uplink: 824MHz - 849MHz, Downlink: 869MHz - 894MHz<br>Lower700MHz<br>Uplink: 698MHz - 716MHz, Downlink: 728MHz - 746MHz<br>Upper700MHz<br>Uplink: 776MHz - 787MHz, Downlink: 746MHz - 757MHz |
| **Signal Booster Type.....:** | Mobile Consumer Signal Booster |
| **Emission Designator .....:** | F9W, G7D, G7W, GXW, W7D |
| **FCC Classification .....:** | B2W/Wideband Consumer Booster (CMRS) |
| **Rating(s).....:** | Adapter Information:<br>MODEL: GME36A-120300FDS<br>INPUT: AC 100-240V, 50/60Hz, 1.2A<br>OUTPUT: DC 12.0V, 3.0A, 36.0W |

Note: The antenna gain listed in this report is provided by applicant, and the test laboratory is not responsible for this parameter.

## 1.2. Model(s) list

None.



Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

# 2. General Information

## 2.1. Test environment and mode

| Item | Normal condition |
|---|---|
| **Temperature** | +25ºC |
| **Voltage** | DC 12V |
| **Humidity** | 56% |
| **Atmospheric Pressure:** | 1008 mbar |
| **Test Mode:** | |
| Engineering mode: | Keep the EUT in continuous transmitting by select channel |

## 2.2. Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

| Equipment | Model No. | Serial No. | FCC ID | Trade Name |
|---|---|---|---|---|
| / | / | / | / | / |



Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

# 3. Facilities and Accreditations

## 3.1. Facilities

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

- FCC - Registration No.: 645098

  SHENZHEN TONGCE TESTING LAB

  Designation Number: CN1205

  The testing lab has been registered and fully described in a report with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

- IC - Registration No.: 10668A

  SHENZHEN TONGCE TESTING LAB

  CAB identifier: CN0031

  The testing lab has been registered by Innovation, Science and Economic Development Canada for radio equipment testing.

## 3.2. Location

SHENZHEN TONGCE TESTING LAB

Address: 2101 & 2201, Zhenchang Factory Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China

TEL: +86-755-27673339

# 4. Test Results and Measurement Data

## 4.1. Requirements

| Limits For Maximum Permissible Exposure (MPE) | | | | |
|---|---|---|---|---|
| Frequency range (MHz) | Electric field strength(V/m) | Magnetic field Strength(A/m) | Power density ($mw/cm^2$) | Averaging time (minutes) |
| 0.3-1.34 | 614 | 1.63 | *100 | 30 |
| 1.34-30 | 824/f | 2.19/f | $*180/f^2$ | 30 |
| 30-300 | 27.5 | 0.0173 | 0.2 | 30 |
| 300-1,500 | | | f/1500 | 30 |
| 1,500-100,000 | | | 1.0 | 30 |

## 4.2. MPE Calculation

Predication of MPE limit at a given distance

$$S = \frac{PG}{4\pi R^2}$$

S = Power density (In appropriate units, e.g., $W/m^2$)

P = Power input to the antenna ( In appropriate units, e.g., W)

G = Power gain og 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(In appropriate units, e.g., m)



Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

## 4.3. Test Result

| Operation Bands | Frequency (MHz) | Max. Output power(dBm) | Cable loss (dB) | Power to Antenna(mW) | Antenna gain | |
|---|---|---|---|---|---|---|
| | | | | | Isotropic | Numeric |
| UL1850-1915 | 1876.65 | 24.54 | 4.07 | 111.43 | 9.5 | 8.91 |
| UL1710-1755 | 1725.92 | 24.42 | 4.31 | 102.57 | 9.5 | 8.91 |
| UL824-869 | 842.17 | 25.03 | 3.14 | 154.53 | 7 | 5.01 |
| UL698-716 | 703.17 | 25.03 | 3.01 | 159.22 | 7 | 5.01 |
| UL776-787 | 778.50 | 24.36 | 3.01 | 136.46 | 7 | 5.01 |
| DL1930-1995 | 1955.74 | 12.70 | 3.56 | 8.20 | 7 | 5.01 |
| DL2110-2155 | 2112.50 | 12.09 | 3.76 | 6.81 | 7 | 5.01 |
| DL869-894 | 882.92 | 11.09 | 2.29 | 7.59 | 6 | 3.98 |
| DL728-746 | 743.50 | 13.48 | 2.06 | 13.87 | 5 | 3.16 |
| DL746-757 | 748.50 | 11.76 | 2.06 | 9.33 | 5 | 3.16 |

| Operation Bands | Power (mW) | Antenna gain(G) | Measure Distance(cm) | Power density ($mW/cm^{2)}$ | MPE limit ($mW/cm^{2)}$ |
|---|---|---|---|---|---|
| UL1850-1915 | 111.43 | 8.91 | 20 | 0.1976 | 1 |
| UL1710-1755 | 102.57 | 8.91 | 20 | 0.1818 | 1 |
| UL824-869 | 154.53 | 5.01 | 20 | 0.1541 | 0.56 |
| UL698-716 | 159.22 | 5.01 | 20 | 0.1588 | 0.47 |
| UL776-787 | 136.46 | 5.01 | 20 | 0.1361 | 0.52 |
| DL1930-1995 | 8.20 | 5.01 | 20 | 0.0082 | 1 |
| DL2110-2155 | 6.81 | 5.01 | 20 | 0.0068 | 1 |
| DL869-894 | 8.07 | 5.01 | 20 | 0.0080 | 0.59 |
| DL728-746 | 13.87 | 3.16 | 20 | 0.0087 | 0.50 |
| DL746-757 | 9.33 | 3.16 | 20 | 0.0059 | 0.50 |


Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com

**Simultaneous Transmission with BLE (FCC ID: 2ATPO-PB03), Evaluation result=0.0018mW/cm$^2$@ 20cm distance.**

| Operation Bands | Result | Limit |
|---|---|---|
| BLE + UL1850-1915 | 0.1994 | 1 |
| BLE + UL1710-1755 | 0.1836 | 1 |
| BLE + UL824-869 | 0.2770 | 1 |
| BLE + UL698-716 | 0.3397 | 1 |
| BLE + UL776-787 | 0.2635 | 1 |
| BLE + DL1930-1995 | 0.0100 | 1 |
| BLE + DL2110-2155 | 0.0086 | 1 |
| BLE + DL869-894 | 0.0154 | 1 |
| BLE + DL728-746 | 0.0192 | 1 |
| BLE + DL746-757 | 0.0136 | 1 |

**Results: PASS**

********END OF REPORT********


Hotline: 400-6611-140 Tel: 86-755-27673339 Fax: 86-755-27673332 http://www.tct-lab.com