

# **RF EXPOSURE REPORT**

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IL	FIIL			
Carat Pro				
N/A				
Oct. 15, 2016 ~ Nov. 02, 2016				
2.1091)				
— KDB 447498 D01				
✓ IEEE C95.1				
CONCLUSION: The submitted sample was found to <u>COMPLY</u> with the test requirement				
by Tom Chen er / EMC Department	Approved by Glyn He Supervisor / EMC Department			
This report is for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitte only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in the 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 produ unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that yo provided to us. You have 60 days from date of issuance of this report, the tests conducted and the correctness of the seport contents. Unless specifically adverss the issue you wish to raise. A failure to raise such issue within the prescribed tim shall constitute your ungualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. Unless specifically adverss the issue you wish to raise. A failure to raise within the prescribed tim the prescribed tim specifically adverss the issue you wish to raise. A failure to raise within the prescribed tim the prescribed tim specifically adverss the issue you wish to raise. A failure to raise within the prescribed tim the prescribed tim specifically adverss the issue you wish to raise. A failure to raise within the prescribed tim the prescribed tim specifically adverss the issue you wish to raise. A failure to raise within the prescribed tim the prescribed tim specifically adverses the issue you wish to raise. A failure to raise within the prescribed tim tests conducted and the correctness of the report contents. Unless specifically adverses the issue you wish to raise. A failure to raise within the prescribed tim tests conducted and the correctness of the report contents.				
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# **RELEASE CONTROL RECORD**

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
FS160928N018	Original release	Nov. 09, 2016

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#### 1. CERTIFICATION

FCC ID:	2AHGU-F007
PRODUCT:	FIIL Carat Pro
BRAND NAME:	FIIL
MODEL NO.:	Carat Pro
ADDITIONAL NO.:	N/A
TEST SAMPLE:	Engineering Sample
APPLICANT:	Fengfan (Suzhou) Audio Technology Co., Ltd.
STANDARDS:	FCC Part 2 (Section 2.1091)
	KDB 447498 D01
	IEEE C95.1

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#### 2. RF EXPOSURE DEFINE

The corresponding SAR Exclusion Threshold condition, listed below:

1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances  $\leq$  50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance,

mm)]  $\cdot [\sqrt{f(GHz)}] \le 3.0$  for 1-g SAR and  $\le 7.5$  for 10-g extremity SAR,16 where

- > f(GHz) 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 test exclusions are applicable only when the minimum test separation distance is  $\leq$  50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm is applied to determine SAR test exclusion.

- 2) At 100 MHz to 6 GHz and for test separation distances > 50 mm, the SAR test exclusion threshold is determined according to the following:
  - a) [Threshold at 50 mm in step 1) + (test separation distance 50 mm)·( f(MHz)/150)] mW, at 100MHz to 1500 MHz
- b) [Threshold at 50 mm in step 1) + (test separation distance 50 mm)  $\cdot$  10] mW at > 1500 MHz and  $\leq$  6 GHz
- 3) At frequencies below 100 MHz, the following may be considered for SAR test exclusion.
  - a) The threshold at the corresponding test separation distance at 100 MHz in step 2) is multiplied by [1 + log(100/f(MHz))] for test separation distances > 50 mm and < 200 mm.
  - b) The threshold determined by the equation in a) for 50 mm and 100 MHz is multiplied by ½ for test separation distances ≤ 50 mm.
  - c) 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 test results to be acceptable.

## 3. CLASSIFICATION

The antenna of this product, under normal use condition, is at less than 20cm away from the body of the user. So, this device is classified as **Portable Device**.



### 4. SAR TEST EXCLUSION THRESHOLDS

According to the KDB 447498:

The maximun average output power specified is 6.07dBm = 4.046mW

The SAR Exclusion Threshold Level:

= 3.0 \* (min. test separation distance, mm) / sqrt(freq. in GHz)

= 3.0 \* 5 / sqrt (2.480) mW

= 9.53 mW

Since the source-based time-averaging conducted output power is well below the SAR low threshold level, so the EUT is considered to **comply** with SAR requirement without testing.