

RF Exposure Evaluation Report

Product : Pencil A11
Trade mark : N/A
Model/Type reference : ME-APP412
Serial Number : N/A
Report Number : EED32O80614701
FCC ID : 2AYOTME-APP412
Date of Issue : May 16, 2022
47 CFR Part 1.1307
Test Standards : 47 CFR Part 2.1093
KDB447498D01 General RF
Exposure Guidance v06
Test result : PASS

Prepared for:

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2 Version

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4 General Information

4.1 Client Information

Applicant:	Shenzhen Qianfenyi Intelligent Technology Co., LTD
Address of Applicant:	Room 2101, Building 3, Nanshan i Park Chongwen, 3370 Liuxian Avenue, Nanshan District, Shenzhen, PRC
Manufacturer:	Shenzhen Qianfenyi Intelligent Technology Co., LTD
Address of Manufacturer:	Room 2101, Building 3, Nanshan i Park Chongwen, 3370 Liuxian Avenue, Nanshan District, Shenzhen, PRC
Factory:	Shenzhen Qianfenyi Intelligent Technology Co., LTD
Address of Factory:	4F, Building E, Baoshi Technology Park, Baoshi Road, Tangtou Community, Shiyuan Street, Bao' an District, Shenzhen, PRC

4.2 General Description of EUT

Product Name:	Pencil A11
Model No.(EUT):	ME-APP412
Trade Mark:	N/A

4.3 Product Specification subjective to this standard

Frequency Range:	2402MHz~2480MHz
Modulation Type:	GFSK
Test Power Grade:	Default
Test Software of EUT:	LeKit v2.5.1a
Antenna Type:	PCB Antenna
Antenna Gain:	0.09dBi
Power Supply:	DC 3.7 V
Max Conducted Peak Output Power:	-2.03dBm
	The Max Conducted Peak Output Power data refer to the report EED32O80614701
Sample Received Date:	May 05, 2022
Sample tested Date:	May 05, 2022 to May 09,2022

Company Name and Address shown on Report, the sample(s) and sample Information was/ were provided by the applicant who should be responsible for the authenticity which CTI hasn't verified.

4.4 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd

Building C, Hongwei Industrial Park Block 70, Bao'an District, Shenzhen, China

Telephone: +86 (0) 755 33683668 Fax:+86 (0) 755 33683385

No tests were sub-contracted.

FCC Designation No.: CN1164

4.5 Deviation from Standards

None.

4.6 Abnormalities from Standard Conditions

None.

4.7 Other Information Requested by the Customer

None.

5 SAR Evaluation

5.1 RF Exposure Compliance Requirement

5.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06
Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

5.1.2 Limits

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

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where $f(\text{GHz})$ is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation¹⁷

The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is ≤ 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

5.1.3 EUT RF Exposure

1) For Bluetooth LE

Measurement Data:

BLE 1M:

GFSK mode				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	-2.13	-2±1	-1	0.794
Middle(2440MHz)	-2.43	-2±1	-1	0.794
Highest(2480MHz)	-3.39	-3±1	-2	0.631

BLE 2M:

GFSK mode				
Test channel	Peak Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power	
			(dBm)	(mW)
Lowest(2402MHz)	-2.03	-2±1	-1	0.794
Middle(2440MHz)	-2.36	-2±1	-1	0.794
Highest(2480MHz)	-3.3	-3±1	-2	0.631

Worst case is BLE 2M: GFSK						
Channel	Maximum Peak Conducted Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power		Calculated value	Exclusion threshold
			(dBm)	(mW)		
Lowest (2402MHz)	-2.03	-2±1	-1	0.794	0.250	3.0
Middle (2440MHz)	-2.36	-2±1	-1	0.794	0.250	
Highest (2480MHz)	-3.3	-3±1	-2	0.631	0.199	

Conclusion: the calculated value ≤ 3.0 , SAR is exempted.

Remark: The Max Conducted Peak Output Power data refer to report Report No.: EED32O80614701.

PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No. EED32O80614701 for EUT external and internal photos.

The test report is effective only with both signature and specialized stamp, The result(s) shown in this report refer only to the sample(s) tested. Without written approval of CTI, this report can't be reproduced except in full.

*** End of Report ***