

RF Exposure Evaluation Report

Product : Memoo
Trade mark : N/A
Model/Type reference : CWMEMOOV01
Serial Number : N/A
Report Number : EED32J00168904
FCC ID : 2ANIH-CWAYMEMOOV01
Date of Issue : Oct. 31, 2017
Test Standards : 47 CFR Part 1.1307(2015)
47 CFR Part 1.1310(2015)
KDB447498D01v06
Test result : PASS

Prepared for:

C-way

55 Rue la boetie, Paris, France, 75008

Prepared by:

Centre Testing International Group Co., Ltd.
Hongwei Industrial Zone, Bao'an 70 District,
Shenzhen, Guangdong, China

TEL: +86-755-3368 3668

FAX: +86-755-3368 3385

Tested By:

Tom - chen

Tom chen (Test Project)

Compiled by:

Max . liang

Max liang (Project Engineer)

Reviewed by:

Kevin Yang

Kevin yang (Reviewer)

Approved by:

Sheek . Luo

Sheek Luo (Lab supervisor)

Date:

Oct. 31, 2017

Check No.: :3043824796



2 Version

Version No.	Date	Description
00	Oct. 31, 2017	Original

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4 General Information

4.1 Client Information

Applicant:	C-way
Address of Applicant:	55 Rue la boetie, Paris, France, 75008
Manufacturer:	Kaertech Limited
Address of Manufacturer:	Suite 1601-02, Seaview Commercial Building, 21-24 Connaught Road West, Sheung Wan, Hong Kong
Factory:	Kaertech Electronics Philippines, Inc.
Address of Factory:	Innovev Building 2A, 141 East Main Avenue, Loop, Phase 6A, Lot 3281-1, Laguna Technopark Inc., SEPZ, Binan, Laguna, Philippines 4024

4.2 General Description of EUT

Product Name:	Memoo
Model No.(EUT):	CWMEMOOV01
Trade Mark:	N/A
EUT Supports Radios application	Bluetooth: 4.0 BT Dual mode Wi-Fi: IEEE 802.11b/g/n(HT20), IEEE 802.11n(HT40)
Software version:	V1.07 (manufacturer declare)
Hardware version:	V4.1 (manufacturer declare)

4.3 Product Specification subjective to this standard

Frequency Range:	Bluetooth: 4.0 BT Dual mode, 2402MHz to 2480MHz Wi-Fi: IEEE 802.11b/g/n(HT20): 2412MHz to 2462MHz IEEE 802.11n(HT40): 2422MHz to 2452MHz	
Modulation Type:	Bluetooth: GFSK, 8DPSK, $\pi/4$ DQPSK Wi-Fi: IEEE for 802.11b: DSSS IEEE for 802.11g :OFDM IEEE for 802.11n(HT20 and HT40) : OFDM	
Test Power Grade:	N/A	
Test Software of EUT:	REALTEK 2.0.0.4 (manufacturer declare)	
Antenna Type:	Chip Antenna	
Antenna Gain:	2dBi	
Power Supply:	Adapter	MODEL:KSA29B0500200D5 Input: 100V-240V,50Hz/60Hz,0.5A Output: 5.0V---2.0A
Conducted Peak Output Power:	13.43dBm	
	The Conducted Peak Output Power data refer to the report EED32J00168901, EED32J00168902, EED32J00168903	
Sample Received Date:	Aug. 04, 2017	
Sample tested Date:	Aug. 04, 2017 to Oct. 27, 2017	
The tested sample(s) and the sample information are provided by the client.		

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4.4 Test Location

All tests were performed at:

Centre Testing International Group Co., Ltd.

Hongwei Industrial Zone, Bao'an 70 District, Shenzhen, Guangdong, China 518101

Telephone: +86 (0) 755 3368 3668 Fax: +86 (0) 755 3368 3385

No tests were sub-contracted.

4.5 Deviation from Standards

None.

4.6 Abnormalities from Standard Conditions

None.

4.7 Other Information Requested by the Customer

None.

5 RF Exposure Evaluation

5.1 RF Exposure Compliance Requirement

5.1.1 Limits

According to FCC Part1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in part1.1307(b)

TABLE 1—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)
(A) Limits for Occupational/Controlled Exposures				
0.3–3.0	614	1.63	*(100)	6
3.0–30	1842/f	4.89/f	*(900/f ²)	6
30–300	61.4	0.163	1.0	6
300–1500			f/300	6
1500–100,000			5	6
(B) Limits for General Population/Uncontrolled Exposure				
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	0.073	0.2	30
300–1500			f/1500	30
1500–100,000			1.0	30

A rough estimation of the expected exposure in power flux density on a given point can be made with the following equation:

$$S = \frac{P \times G}{4 \times \pi \times R^2}$$

Where:

S = power density

P = power input to the antenna

G = numeric gain of the antenna in the direction of interest relative to an isotropic radiator

R= distance to the centre of radiation of the antenna

EIRP = P*G

The antenna of the product, under normal use condition is at least 20 cm away from the body of the user.

Warning statement to the user for keeping at least 20cm separation distance and the prohibition of operating to a person has been printed on the user's manual. Therefore, the S of the device is calculated with R=20cm, and if it is below the limit S, then we can conclude the device complies with the rules.

5.1.2 Test Procedure

Software provided by client enabled the EUT to transmit data at lowest, middle and highest channel individually.

5.1.3 EUT RF Exposure Evaluation

Antenna Gain: 2dBi

Output Power into Antenna & RF Exposure Evaluation Distance:

Max Conducted Peak Output Power(dBm)	Gain (dBi)	EIRP* (dBm)	EIRP (mW)	R (cm)	S (mW/cm ²)	Limit (mW/cm ²)	Result
13.43	2	15.43	34.91	20	0.007	1.0	Pass

Note: Refer to report No. EED32J00168901, EED32J00168902, EED32J00168903 for EUT test Max Conducted Peak Output Power value.

PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No. EED32J00168901 for EUT external and internal photos.

*** End of Report ***

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