

RF Exposure Evaluation Report

Product : Ultra-Thin Wireless Keyboard
Trade mark : MINISO
Model/Type reference : CK910B
Serial Number : N/A
Report Number : EED32N80528502
FCC ID : 2AMSRCK910B
Date of Issue : Aug. 11, 2021
Test Standards : 47 CFR Part 1.1307
47 CFR Part 2.1093
KDB447498D01 General RF
Exposure Guidance v06
Test result : PASS

Prepared for:

Dongguan Couso Technology Co.,Ltd
No.26 minye road,tangxia town,Dongguan City,
Guangdong Province. China

Prepared by:

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Aug. 11, 2021



Check No.:9704290621

2 Version

Version No.	Date	Description
00	Aug. 11, 2021	Original

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4 General Information

4.1 Client Information

Applicant:	Dongguan Couso Technology Co.,Ltd
Address of Applicant:	No.26 minye road,tangxia town,Dongguan City,Guangdong Province. China
Manufacturer:	Dongguan Couso Technology Co.,Ltd
Address of Manufacturer:	No.26 minye road,tangxia town,Dongguan City,Guangdong Province. China
Factory:	Dongguan Couso Technology Co.,Ltd
Address of Factory:	No.26 minye road,tangxia town,Dongguan City,Guangdong Province. China

4.2 General Description of EUT

Product Name:	Ultra-Thin Wireless Keyboard
Mode No.(EUT):	CK910B
Add model:	Ultra-Thin Wireless keyboard,Ultra-Thin Wireless keyboard (White),Ultra-Thin Wireless keyboard (sliver) ,CS1000,CS1100,CS1200,CS1300,CS1400,CS1500,CS1600,CS1700,CS1800,CS1900,CS2000, CS2100,CS2200,CS2300,CS2400,CS2500,CS2600,CS2700,CS2800,CS2900,CS3000,CS3100,CS3200,CS3300,CS3400, CS3500,CS3600,CS3610,CS3620,CS3630,CS3640,CS3650,CS3660,CS3670,CS3680,CS3690,CS3700,CS3710,CS3720,CS3730,CS3740,CS3750,CS3760,CS3770,CS3780,CS3790,CS3800, CS3810,CS3820,CS3830,CS3840,CS3850,CS3860,CS3870,CS3880, CS3890,CS4000, CS4100, CS4200,CS4300, CS4400, CS4500, CS4570, CS4380,CS4550 CS4600,CS4650, CS4700,CS4800, CS4900, CS5000, CS5100, CS5200, CS5300, CS5400, CS5500, CS5600,CS5700, CS5800, CS5900, CS6000, CS6100, CS6200, CS6300, CS6400, CS6500,CS6600, CS6700, CS6800, CS6900, CS7000, CS7100, CS7200, CS7300, CS7400,CS7500, CS7600, CS7700, CS7800, CS7900, CS8000, CS8100, CS8200, CS8300,CS8400, CS8500, CS8600, CS8700, CS8800, CS8900, CS9000, CS9100, CS9200,CS9300, CS9400, CS9500, CS9600, CS9700, CS9800, CS9900,CK300,CK310,CK320,CK330,CK340,CK350,CK360,CK370,CK380,CK390,CK400, CK410, CK420,CK430, CK440, CK450, CK455 ,CK465, CK460, CK470T, CK480, CK490,CK500,CK510, CK520, CK530, CK540, CK550, CK560, CK570, CK580, CK590, CK600,CK601,CK700,CK710,CK720,CK730,CK740,CK750,CK760,CK770,CK780.CK790,CK800,CK801,CK802,CK803,CK804,CK805,CK806,CK807,CK808,CK809,CK900,CK920, CK921, CK923, CK925,CK926, CK927,CK928,CK929, CK930, CK940,CK950, CK960, CK970, CK980, CK990.
Trade Mark:	MINISO
EUT Supports Radios application:	BT 4.2 Single module 2402MHz to 2480MHz

4.3 Product Specification subjective to this standard

Frequency Range:	BT 4.2 Single module 2402MHz to 2480MHz;
Modulation Type:	GFSK
Test Power Grade:	Default
Test Software of EUT:	fcc_test_tool v1.6
Antenna Type:	PCB antenna

Antenna Gain:	0.55dBi
Power Supply:	2X1.5V Batteries; size AAA
Max Conducted Peak Output Power:	-1.71dBm
	The Max Conducted Peak Output Power data refer to the report EED32N80528501
Sample Received Date:	Mar. 16, 2021
Sample tested Date:	Mar. 16, 2021 to Apr. 21, 2021
<p>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.</p> <p>Model:CK910B,Ultra-Thin Wireless keyboard,Ultra-Thin Wireless keyboard (White),Ultra-Thin Wireless keyboard (silver) ,CS1000,CS1100,CS1200,CS1300,CS1400,CS1500,CS1600,CS1700,CS1800,CS1900,CS2000, CS2100,CS2200,CS2300,CS2400,CS2500,CS2600,CS2700,CS2800,CS2900,CS3000,CS3100,CS3200,CS3300,CS3400, CS3500,CS3600,CS3610,CS3620,CS3630,CS3640,CS3650,CS3660,CS3670,CS3680,CS3690,CS3700,CS3710,CS3720,CS3730,CS3740,CS3750,CS3760,CS3770,CS3780,CS3790,CS3800, CS3810,CS3820,CS3830,CS3840,CS3850,CS3860,CS3870,CS3880, CS3890,CS4000, CS4100, CS4200,CS4300, CS4400, CS4500, CS4570, CS4380,CS4550 CS4600,CS4650, CS4700, CS4800, CS4900, CS5000,CS5100, CS5200, CS5300, CS5400, CS5500, CS5600, CS5700, CS5800, CS5900, CS6000, CS6100, CS6200, CS6300, CS6400, CS6500, CS6600, CS6700, CS6800, CS6900, CS7000, CS7100, CS7200, CS7300, CS7400, CS7500, CS7600, CS7700, CS7800, CS7900, CS8000, CS8100, CS8200, CS8300, CS8400, CS8500, CS8600, CS8700, CS8800, CS8900, CS9000, CS9100, CS9200, CS9300, CS9400, CS9500, CS9600, CS9700, CS9800, CS9900,CK300,CK310,CK320,CK330,CK340,CK350,CK360,CK370,CK380,CK390,CK400, CK410, CK420, CK430, CK440, CK450, CK455 ,CK465, CK460, CK470T, CK480, CK490,CK500 CK510, CK520, CK530 , CK540, CK550, CK560, CK570, CK580, CK590, CK600,CK601,CK700,CK710,CK720,CK730,CK740,CK750, CK760,CK770,CK780,CK790, CK800,CK801,CK802,CK803,CK804,CK805,CK806,CK807,CK808,CK809,CK900, CK920, CK921, CK923, CK925,CK926, CK927,CK928,CK929, CK930, CK940, CK950, CK960, CK970, CK980, CK990.</p> <p>Only the model CK910B was tested, their electrical circuit design, layout, components used and internal wiring are identical, Only the model , color of the appearance is different.</p>	

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.

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:

$$\left[\frac{\text{max. power of channel, including tune-up tolerance, mW}}{(\text{min. test separation distance, mm})} \cdot \sqrt{f(\text{GHz})} \right] \leq 3.0$$
 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

5.1.2 EUT RF Exposure

The tune-up power is -1.5 dBm +/- 0.5dB, therefore the highest tune-up power is

-1.000 (0.79 mW) @ 2402 MHz

When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 5) in section 4.1 is applied to determine SAR test exclusion.

So,

$$\left(\frac{0.79}{5\text{mm}} \right) * \left(2.402\text{GHz}^{0.5} \right) = 0.2$$

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

$$[\sqrt{f(\text{GHz})}] = 0.2 < 3.0$$

Therefore, standalone SAR measurements are not required for both head and body

PHOTOGRAPHS OF EUT Constructional Details

Refer to Report No. EED32N80528501 for EUT external and internal photos.

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*** End of Report ***