RF Exposure Requirements

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant:	HOZO DESIGN CO., LIMITED
Address of applicant:	UNIT 917A, 9/F., TOWER A, NEW MANDARIN PLAZA, NO.14 SCIENCE MUSEUM ROAD, TSIMSHATSUI, KOWLOON
Manufacturer:	GuangZhou HouZuo Technology Co., Ltd
Address of manufacturer:	101 AoTeLang KeJiYuan building4,room101, HuangPu District, GuangZhou, GuangDong.

General Description of EUT	
Product Name:	NeoRulerGO Digital Rolling Ruler
Brand Name:	/
Model No.:	G01
Adding Model(s):	/
Rated Voltage:	DC 3.7V from Battery
Battery Capacity:	/
Software Version:	FCC Assist 1.0.2.2
Hardware Version:	RS01
Serial Number:	WTX24X06170054W001
FCC ID:	2BBKM-G01

Technical Characteristics of EUT	
Bluetooth Version:	V5.4 BLE
Frequency Range:	2402-2480MHz
RF Output Power:	-2.14dBm
Data Rate:	1Mbps
Modulation:	GFSK
Quantity of Channels:	40
Channel Separation:	2MHz
Type of Antenna:	PCB
Antenna Gain:	5.54dBi

1.2 Standard Applicable

According to §1.1307(b)(1) and KDB 447498 D01 General RF Exposure Guidance v06, the following RF exposure evaluation shall to demonstrate RF exposure compliance.

[(max. power of channel, including tune-up tolerance, mW) / (min. test separation distance, mm)] · [√f(GHz)] ≤ 3.0

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 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 according to 4.1 f) is applied to determine SAR test exclusion.

1.3 Calculation Method

Bluetooth

Tx frequency range: 2402~2480MHz
Min. test separation distance: 5mm
Maximum Tune-up Conducted Output Power: -2dBm
RF channel transmit frequency: 2440MHz
Result: 0.631
Limit: 3.0

So the transmitter complies with the RF exposure requirements and the SAR is not required.