

# **RF Exposure Evaluation**

**Test report**  
**On Behalf of**  
**Dongguan Lingjie Electronics & Technology Co., Ltd**  
**For**  
**Wireless Mouse**  
**Model No.: E160**

**FCC ID: 2ANBU-E160**

**Prepared for :** **Dongguan Lingjie Electronics & Technology Co., Ltd**  
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**Date of Report:** **Apr. 16, 2020**

## 1 General Description of EUT

Product Name:	Wireless Mouse
Model/Type reference:	E160
Serial Model:	N/A
Trade Mark:	N/A
FCC ID	2ANBU-E160
Hardware Version:	V2.0
Software Version:	V1.0
Operation frequency:	2403.85MHz to 2479.85MHz
Channel separation:	$\geq 3\text{MHz}$
Channel number:	16
Modulation Technology:	GFSK
Antenna Type:	PCB Antenna
Antenna Gain:	0dBi
Power Supply:	DC1.5V from AA battery

## 2 RF Exposure Compliance Requirement

### 2.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06

#### 4.3.1. 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.

### 2.2 Limits

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:

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

Where  $f(\text{GHz})$  is the RF channel transmit frequency in GHz

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

The results 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

3 EUT RF Exposure

For 2.4G

GFSK						
Channel	Maximum Peak Conducted Output Power (dBm)	Tune up tolerance (dBm)	Maximum tune-up Power		Calculated value	Exclusion threshold
			(dBm)	(mW)		
Lowest (2403.85MHz)	0.496	$0 \pm 1$	1	1.259	0.390	3.0
Middle (2441.85MHz)	-1.543	$-2 \pm 1$	-1	0.794	0.248	
Highest (24879.85MHz)	-2.380	$-2 \pm 1$	-1	0.794	0.266	
Conclusion: the calculated value $\leq 3.0$ , SAR is exempted.						

Remark: The Max Conducted Peak Output Power data refer to report Report No.: HK2004100592-E