

## RF EXPOSURE EVALUATION

### EUT Specification

<b>EUT</b>	LED Remote Control
<b>Model Number</b>	TY105-113-01
<b>FCC ID</b>	2BB8G-TY10511301
<b>Antenna gain (Max)</b>	0dBi
<b>Operation Frequency</b>	433.92MHz
<b>Input Rating</b>	DC 3.0V
<b>Standard</b>	47 CFR Part 1.1307 47 CFR Part 1.1310 KDB447498D01 General RF Exposure Guidance v06
<b>Modulation</b>	ASK

### 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:  $[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$  for 1-g SAR and  $\leq 7.5$  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 calculation<sup>17</sup>. The result 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.

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.

### Calculated Result and Limit

For 433.92MHz SRD

Ant gain=0dBi

Ant numeric gain= 1

Field strength = 76.44dBuV/m@3m

$$P = \{[10^{\left(\frac{76.44}{20}\right)} / 10^6 * 3]^2 / (30 * 1) * 1000\text{mw} = 0.0132\text{mW}$$

$$0.0132\text{mW} < 1\text{ mW}$$

Remark: The Max Conducted Peak Output Power data refer to report Report No.:  
90688-23-72-23-PP001