

RF Exposure Evaluation

FCC ID:2BD8V-001

1. Client Information

| | | |
|---------------------|---|--|
| Applicant | : | Zhongshan Aoteng Electronic Technology Co.,Ltd |
| Address | : | 1, 3/F, West Building, No. 33, Shuncheng Industrial Zone, Haizhou Sha Yuan, Guzhen Town, Zhongshan City, Guangdong Province, China |
| Manufacturer | : | Zhongshan Aoteng Electronic Technology Co.,Ltd |
| Address | : | 1, 3/F, West Building, No. 33, Shuncheng Industrial Zone, Haizhou Sha Yuan, Guzhen Town, Zhongshan City, Guangdong Province, China |

2. General Description of EUT

| | | | |
|---|---|---|-----------------------|
| EUT Name | : | 2.4G remote control | |
| Model(s) No. | : | SJ-GY-19K-, GY-19K-00-, ZSJ-1903-02, CF-2.4g24M-TX-18Key-, AQO-OF 2.4g-18KEY-, AQO-Hongyun Wind 2.4g-19KEY-, AOQ-2.4g24M-TX-15Key-, CF-2.4g24M-TX-18Key-, AOQ-SWPCB1-, AOQ-RF21KEY-, AOQ-2.4G-221-, AOQ-2.4G-342-, AOQ-2.4G-423-, AOQ-2.4G-567-, AOQ-2.4G-683-, AOQ-2.4G-772-, AOQ-2.4G-863-, AOQ-2.4G-942-, AOQ-2.4G-AP782-, AOQ-2.4G-OL891- | |
| Model Difference | : | All PCB boards and circuit diagrams are the same, the only difference is that appearance. | |
| Product Description | : | Operation Frequency: | 2.4G: 2402MHz~2480MHz |
| | : | Number of Channel: | 2.4G: 4 channels |
| | : | Antenna Gain: | 0dBi PCB Antenna |
| | : | Modulation Type: | GFSK |
| | : | Bit Rate of Transmitter: | 1Mbps |
| Power Supply | : | DC 1.5V by AAA battery*2 | |
| Software Version | : | GY3154_V02 | |
| Hardware Version | : | GY_YK_19KV2V3 | |
| Remark: The antenna gain provided by the applicant, the adapter and verified for the RF conduction test and adapter provided by TOBY test lab. | | | |

Note: More test information about the EUT please refer the RF Test Report.

SAR Test Exclusion Calculations

1. FCC: According to KDB 447498 D01 Mobile and Portable Devices RF Exposure Procedures and Equipment Authorization Policies v06.

(1) Clause 4.3: General SAR test reduction and exclusion guidance

Sub clause 4.31: Standalone SAR test exclusion considerations

1) The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6GHz at test separation distance ≤ 5 mm are determined by:

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

$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation, mm})] * [\sqrt{f(\text{GHz})}] \leq 7.5.0$ for 10-g SAR

2. Calculation:

| Test separation: 5mm | | | | | | |
|----------------------|-----------------------|------------------------------|--------------------------------------|-------------------------------------|-------------------|-----------------|
| GFSK | | | | | | |
| Frequency (GHz) | Conducted Power (dBm) | Turn-up Power Tolerance (dB) | Max power of tune up tolerance (dBm) | Max power of tune up tolerance (mw) | Calculation Value | Threshold Value |
| 2.402 | -2.061 | -2±1 | -1 | 0.794 | 0.246 | 3.0 |
| 2.440 | -2.024 | -2±1 | -1 | 0.794 | 0.248 | 3.0 |
| 2.480 | -2.766 | -2±1 | -1 | 0.794 | 0.250 | 3.0 |

Conclusion:

The measurement results comply with the FCC Limit per 47 CFR 2.1093 for the uncontrolled RF Exposure and SAR Exclusion Threshold per KDB 447498 v06.

-----END OF REPORT-----