



RF Exposure Requirements

1 General Information

Client Information

Applicant : Guangdong BIG Climatic Manufacture Co., LTD
Address of applicant : No. 20-3, Nantou Avenue East, Nantou Town, Zhongshan City, Guangdong, China
Manufacturer : Guangdong BIG Climatic Manufacture Co., LTD Nantou Branch
Address of manufacturer : No. 20, Nantou Avenue East, Nantou Town, Zhongshan City, Guangdong, China

General Description of E.U.T

FCC ID : 2BCMJ-QB100
Product Name : Remote Control
Model No. : QB100-24TX-B02
Model Description : ---
Rated Voltage : Battery 3V (2*1.5V AAA)
Battery Capacity : ---
Power Adapter : ---

Technical Characteristics of EUT

Frequency Range : 2422-2466 MHz
Max. Field Strength : 100.31 dB μ V/m
Modulation : GFSK
Quantity of Channels : 3
Channel Separation : 1MHz
Type of Antenna : PCB Antenna
Antenna Gain : 0dBi



2 Applicable Standard

According to the KDB 447498 D01 v07 and part 2.1093:

For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR and ≤ 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
- The result is rounded to one decimal place for comparison

3 Calculation Result

Frequency (MHz)	Max. Field Strength (dB μ V/m)	Max. Output power (dBm)	Max. Tune-up power		Min. Separation Distance (mm)	Calculatio n Result	Limit
			(dBm)	(mW)			
2422	100.31	5.15	6.00	3.98	5	1.24	3
Remark: Calculated the Max.output power from the radiated field strength in the far field using Equation: $\text{Max.output power (in dBm)} = E_{\text{Meas}} + 20\log(d_{\text{Meas}}) - 104.7$ Where E_{Meas} is the field strength of the emission at the measurement distance, in dB μ V/m d_{Meas} is the measurement distance, in m							

The exclusion thresholds is $1.24 < 3$, so the transmitter complies with the RF exposure requirements and the SAR is not required.

=====End of Report=====