RF EXPOSURE EVALUATION

EUT Specification

EUT	Remote Controller			
Model Number	ERF6K66H, ERF6xy66pqrstuvw,x: A-Z; y: A-Z, Blank;			
	p: A-Z, Blank; q: A-Z, Blank; r: (, Blank; s: 0-9, Blank; t: 0-9, Blank; u: 0-9, Blank; v: 0-9, Blank; w:), Blank			
FCC ID	2AVIGBR0021			
Antenna gain(Max)	2.7526dBi			
Operation Frequency	2402-2480MHz			
Input Rating	DC 5V from adapter or DC 3.05-4.12V from super- capacitor			
Classification Per Stipulated	§ 15.247(i), § 2.1093			
Test Standard				
Modulation	GFSK			
Max.outputpower	1Mbps: 7.28dBm (0.005346W)			

TestRequirement:

According to §15.247(i) and §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guide lines.

The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] $\cdot [\sqrt{f_{(GHz)}}] \le 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, 24 where

- f_(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation ²⁵
- The result is rounded to one decimal place for comparison
- . 3.0 and 7.5 are referred to as the numeric thresholds in the step 2 below

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 5) in section 4.1 is applied to determine SAR test exclusion.

Routine SAR evaluation refers to that specifically required by §2.1093, using measurements or computer simulation. When routine SAR evaluation is not required, portable transmitters without put power greater than the applicable low threshold require SAR evaluation to quality for TCB approval.

One antenna is available for the EUT. The minimum separation distance is 5mm.

BLE DTS:

Transmit Frequency (MHz)	Bit Rate of Transmitter	Mode	Measured Power (dBm)	Tune up Power (dBm)	Max tune up power(dBm)	Calculation Result	1-g SAR
2402	1Mbps	GFSK	7.28	7±1	8	1.955896	3
2442	1Mbps	GFSK	6.17	6±1	7	1.566440	3
2480	1Mbps	GFSK	5.52	5±1	6	1.253857	3

According to KDB 447498, no stand-alone required for BT antenna, and no simultaneous SAR measurement is required.

Signature:

Stone Tang

Date: 2025-01-13

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