

## **RF EXPOSURE EVALUATION**

## **EUT Specification**

EUT	IP Bluetooth Sport buds			
Model Number	BTE2-FD,SKU#2199214			
FCC ID	2AOW6-BTE2-FD			
Antenna gain (Max)	0dBi			
<b>Operation Frequency</b>	2402-2480MHz			
Input Rating	DC 5V from adapter, DC 3.7V Battery			
Classification Per	§15.247(i), §2.1093			
Stipulated Test Standard				
Kind of Device: Bluetooth Ver.5.1				
Modulation	BT:(GFSK, π/4-DQPSK)			
Max. output power	BT: 3.3dBm(0.002138 W)			

## Test Requirement:

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 guidelines.

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:

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

- f<sub>(GHz)</sub> is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation<sup>25</sup>
- 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  $\leq$  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 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 with output 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.

BT DSS:

Transmit		Measure	Tune	Max tune up	Calculation	1-g
Frequency	Mode	d Power	upPower	power(dBm)	Result	SAR
(MHz)		(dBm)	(dBm)	power(ubili)	Result	SAR
2.402	GFSK	0.95	0±1	1	0.3902263	3
2.441	GFSK	3.23	3±1	4	0.7848992	3
2.480	GFSK	3.30	3±1	4	0.7911445	3
2.402	П/4-DQ	-1.54	-1±1	0	0.3099677	3
	PSK					
2.441	П/4-DQ	1.31	1±1	2	0.4952379	3
	PSK					
2.480	П/4-DQ	1.07	1±1	2	0.4991785	3
	PSK					

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

Signature:

Sam Lv Date: 2020-03-31