

RF EXPOSURE EVALUATION

EUT Specification

EUT	Party Speaker			
Model Number	TAX4207/10,TAX4207YW/10,TAX4207/12,TAX4207YW/12			
	TAX4207,TAX4207YW,TAX4207/37,TAX4207YW/37,TAX4			
	207xx/yy(xx=A-Z or Nilyy=00-99 or Nil, for country code)			
FCC ID	2AR2STAX4207			
Antenna gain (Max)	0dBi			
Operation Frequency	2402-2480MHz			
Input Rating	AC 100-240V 50/60Hz, 50W Built-in lithium battery 11.1V			
Classification Per	§15.247(i), §2.1093			
Stipulated Test Standard				
Kind of Device: Bluetooth Ver.5.0				
Modulation	DSS:GFSK, π/4-DQPSK,8DPSK			
Max. output power	DSS: 5.12 dBm(0.003251W)			

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 ≤ 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 calculation²⁵
- 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.

DSS:	

	Measure	Tune	Max tune up	Calculation	1-g
Mode	d Power	upPower	· ·		SAR
	(dBm)	(dBm)	power(ubiii)	Result	SAR
GFSK	2.01	2±1	3	0.6184670	3
GFSK	4.49	4±1	5	0.9881295	3
GFSK	5.05	5±1	6	1.2538796	3
П/4-DQ	1.92	1±1	2	0 4012659	3
PSK				0.4912030	3
П/4-DQ	4.44	4±1	5	0 0991205	3
PSK				0.9001295	3
П/4-DQ	5.02	5±1	6	1 2529706	3
PSK				1.2030790	3
8DPSK	2.12	2±1	3	0.6184670	3
8DPSK	4.54	4±1	5	0.9881295	3
8DPSK	5.12	5±1	6	1.2538796	3
	GFSK GFSK N/4-DQ PSK N/4-DQ PSK N/4-DQ PSK 8DPSK 8DPSK	Mode d Power (dBm) GFSK 2.01 GFSK 2.01 GFSK 5.05 П/4-DQ 1.92 PSK - П/4-DQ 4.44 PSK - П/4-DQ 5.02 PSK - 8DPSK 2.12 8DPSK 4.54	Mode d Power (dBm) upPower (dBm) GFSK 2.01 2±1 GFSK 2.01 2±1 GFSK 5.05 5±1 Π/4-DQ 1.92 1±1 PSK - - Π/4-DQ 4.44 4±1 PSK - - Π/4-DQ 5.02 5±1 SDPSK 2.12 2±1 8DPSK 4.54 4±1	Mode d Power (dBm) upPower (dBm) Max tune up power(dBm) GFSK 2.01 2±1 3 GFSK 2.01 2±1 3 GFSK 4.49 4±1 5 GFSK 5.05 5±1 6 Π/4-DQ 1.92 1±1 2 PSK - - - Π/4-DQ 4.44 4±1 5 PSK - - - Π/4-DQ 5.02 5±1 6 PSK - - - 8DPSK 2.12 2±1 3 8DPSK 4.54 4±1 5	Mode d Power (dBm) upPower (dBm) Max tune up power(dBm) Calculation Result GFSK 2.01 2±1 3 0.6184670 GFSK 2.01 2±1 3 0.6184670 GFSK 4.49 4±1 5 0.9881295 GFSK 5.05 5±1 6 1.2538796 Π/4-DQ 1.92 1±1 2 0.4912658 PSK 1 5 0.9881295 Π/4-DQ 4.44 4±1 5 0.9881295 PSK 5.02 5±1 6 1.2538796 N/4-DQ 5.02 5±1 6 1.2538796 PSK 5.02 5±1 6 1.2538796 RSK 2.12 2±1 3 0.6184670 8DPSK 2.12 2±1 3 0.6184670 8DPSK 4.54 4±1 5 0.9881295

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

Signature:

Sam Lv Date: 2022-05-31