RF EXPOSURE EVALUATION

EUT Specification

EUT	Electronic Self Balancing Hoverboard
Model Number	RT802
FCC ID	2APO6OTTO802B
Antenna gain (Max)	0dBi
Operation Frequency	2402-2480MHz
Input Rating	AC 120-240V, 50/60Hz DC 42.0V
Classification Per Stipulated Test Standard	§15.247(i), §2.1093
Kind of Device: Bluetooth	
Modulation	GFSK, π/4-DQPSK, 8DPSK
Max. output power	3.29 dBm (0.002133 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* ≤ 50 mm are determined by:

[(*max. power of channel, including tune-up tolerance, mW*)/(*min. test separation distance, mm*)] · [$\sqrt{f_{(GHz)}}$] ≤ 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 with output power greater than the applicable low threshold require SAR evaluation to quality for TCB approval.

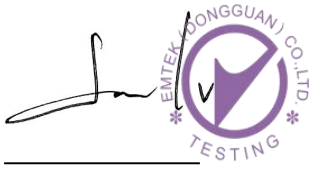
One antenna is available for the EUT. The minimum separation distance is 5mm.

BT DSS:

Transmit Frequency (MHz)	Mode	Measured Power (dBm)	Tune up Power (dBm)	Max tune up power(dBm)	Calculation Result	1-g SAR
2402	GFSK	1.09	1±1	2	0.4912658	3
2441	GFSK	0.74	0±1	1	0.3933815	3
2480	GFSK	0.26	0±1	1	0.3965115	3
2402	Π/4-DQPSK	3.01	3±1	4	0.7786038	3
2441	Π/4-DQPSK	2.55	2±1	3	0.6234676	3
2480	Π/4-DQPSK	2.53	2±1	3	0.6284284	3
2402	8DPSK	3.29	3±1	4	0.7786038	3
2441	8DPSK	2.96	2±1	3	0.6234676	3
2480	8DPSK	2.36	2±1	3	0.6284284	3

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

Signature:



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