RF EXPOSURE EVALUATION

EUT Specification

EUT	Helmet TWS Bluetooth Headset
Model Number	JYM 0021
FCC ID	2BDD2-JYM0021
Antenna gain (Max)	0dBi
Operation Frequency	2402-2480MHz
Input Rating	DC 5V/DC 3.7V
Classification Per Stipulated Test Standard	§15.247(i), §2.1093
Modulation	BT: GFSK, π/4-DQPSK BLE: GFSK
Max. output power	BT: 3.08dBm(0.0020W) BLE: 2.04dBm(0.0016W)

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

Transmit Frequency (MHz)	Mode	Measured Power (dBm)	Tune up Power (dBm)	Max tune up power(dBm)	Calculation Result	1-g SAR
2441	2-DH5	3.08	3±1	4	0.78	3

BLE

Transmit Frequency (MHz)	Mode	Measured Power (dBm)	Tune up Power (dBm)	Max tune up power(dBm)	Calculation Result	1-g SAR
2440	BLE 1M	2.04	2±1	3	0.62	3

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

Signature:

Shawn Wen
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