

Applicant	Name: OPSMEN TECH CO.,LTD Address: Room 601, Building A, No.94 Liwan Road, Liwan District, Guangzhou, China		
Manufacturer	Name: OPSMEN TECH CO.,LTD Address: Room 601, Building A, No.94 Liwan Road, Liwan District, Guangzhou, China		
Equipment Under Test	Product Name : Wireless headset Model No. : XDZ-H20T Trade mark : Earmor Serial no. : H20T202206010001 Sampling : 1-1		
Date of Receipt.	2022.04.12	Date of Testing	2022.04.12~2022.06.10

1. General Product Information

1.1 General information

Product Name	Wireless headset
Model No.	XDZ-H20T
Power Supply	DC 5V
Antenna Type	Internal Antenna
Antenna Gain	Antenna 1: 10.0 dBi (provided by client)
Beamforming gain	Unsupported
Frequency Range	2402~2480MHz
Operate Temp.Range	-40°C to +70°C

Note:

1. The information of the EUT is declared by the manufacturer.
2. The laboratory is not responsible for the product technical specification provided by the client.

2. Human Exposure Assessment

2.1 RF EXPOSURE DEFINE

KDB 447498 D01 v06:

The corresponding SAR Exclusion Threshold condition, listed below:

- 1) 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)] $\cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where
 - $f(\text{GHz})$ is the RF channel transmit frequency in GHz
 - Power and distance are rounded to the nearest mW and mm before calculation
 - The result is rounded to one decimal place for comparisonThe 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 is applied to determine SAR test exclusion.
- 2) At 100 MHz to 6 GHz and for test separation distances > 50 mm, the SAR test exclusion threshold is determined according to the following:
 - a) [Threshold at 50 mm in step 1) + (test separation distance - 50 mm) $\cdot (f(\text{MHz})/150)$] mW, at 100 MHz to 1500 MHz
 - b) [Threshold at 50 mm in step 1) + (test separation distance - 50 mm) $\cdot 10$] mW at > 1500 MHz and ≤ 6 GHz
- 3) At frequencies below 100 MHz, the following may be considered for SAR test exclusion.
 - a) The threshold at the corresponding test separation distance at 100 MHz in step 2) is multiplied by $[1 + \log(100/f(\text{MHz}))]$ for test separation distances > 50 mm and < 200 mm.
 - b) The threshold determined by the equation in a) for 50 mm and 100 MHz is multiplied by $\frac{1}{2}$ for test separation distances ≤ 50 mm.
 - c) SAR measurement procedures are not established below 100 MHz. When SAR test exclusion cannot be applied, a KDB inquiry is required to determine SAR evaluation requirements for any test results to be acceptable.

KDB 447498 D01 v07:

2.1.2 1-mW Test Exemption

Per § 1.1307(b)(3)(i)(A), a single RF source is exempt RF device (from the requirement to show data demonstrating compliance to RF exposure limits, as previously mentioned) if the available maximum time-averaged power is no more than 1 mW, regardless of separation distance.

This exemption applies to all operating configurations and exposure conditions, for the frequency range 100 kHz to 100 GHz, regardless of fixed, mobile, or portable device exposure conditions. This is a standalone exemption, and it cannot be applied in conjunction with any other test exemption.

2.2 CLASSIFICATION

The antenna of this product, under normal use condition, is at less than 20cm away from the body of the user. So, this device is classified as Portable Device.

3. RF Output Power

The tuned conducted Average Power (declared by client)

Mode	Frequency (MHz)	Target Power (dBm)	Tolerance (dBm)	Lower Tolerance (dBm)	Upper Tolerance (dBm)
BT(DH5)	2402-2480MHz	-14.00	+ -2	-16.00	-12.00
BT(2DH5)	2402-2480MHz	-14.00	+ -2	-16.00	-12.00

The conducted power turn-up tolerance reference manufacturer specification.

Test Mode	Antenna	Center Frequency[MHz]	Result[dBm]	Limit[dBm]	Verdict
DH5	Ant1	2402	-14.77	≤20.97	PASS
		2441	-14.3	≤20.97	PASS
		2480	-13.88	≤20.97	PASS
2DH5	Ant1	2402	-14.13	≤20.97	PASS
		2441	-13.67	≤20.97	PASS
		2480	-13.14	≤20.97	PASS

Note: The relevant measured result has the offset with cable loss already.

4. Test Results

KDB 447498 D01 v06:

Frequency (MHz)	Maximum source-based time averaged conducted output power (dBm)	Minimum separation distance (mm)	Result of Eq. 1	Limit for 1-g SAR	Limit for 10-g extremity SAR	Verdict
2402-2480	-12.00	5	0.020	3.0	7.5	Exempt from SAR

KDB 447498 D01 v07:

Frequency (MHz)	Maximum source-based time averaged conducted output power (dBm)	Maximum source-based time averaged conducted output power (mW)	Limit (mW)	Verdict
2402-2480	-12.00	0.063	1	Exempt from SAR

Therefore this device complies with FCC's RF radiation exposure limits for general population without SAR evaluation.