

FCC RF EXPOSURE REPORT

FCC ID: 2AKSOH1001

Project No.	: 2107C053
Equipment	: H10 Low Latency Headband
Brand Name	: AIAIAI
Test Model	: H10
Series Model	: N/A
Applicant	: AIAIAI ApS
Address	: Studiestræde 31, DK-1455 Copenhagen K, Denmark
Manufacturer	: AIAIAI ApS
Address	: Studiestræde 31, DK-1455 Copenhagen K, Denmark
Factory	: OSM HUIZHOU LIMITED
Address	: A02, Taixiang Road, High-tech Industrial Park, Sandong Town, Huicheng
	District, Huizhou City, Guangdong Province, P.R.C
Date of Receipt	: Jul. 09, 2021
Date of Test	: Jul. 14, 2021 ~ Nov. 02, 2021
Issued Date	: Nov. 04, 2021
Report Version	: R02
Test Sample	: Engineering Sample No.: DG20210712160
Standard(s)	: FCC Guidelines for Human Exposure IEEE C95.1 & KDB447498 D01

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

Evon

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REPORT ISSUED HISTORY

Report Version	Description	Issued Date
R00	Original Issue.	Oct. 26, 2021
R01	Revised report to address comments.	Nov. 02, 2021
R02	Revised report to address comments.	Nov. 04, 2021



1. TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No. 3 Jinshagang 1st Rd. Shixia, Dalang Town, Dongguan City, Guangdong, People's Republic of China. BTL's Test Firm Registration Number for FCC: 357015 BTL's Designation Number for FCC: CN1240

2. GENERAL CONCULUSION

According to FCC KDB447498 D01, Appendix A, SAR Test Exclusion Thresholds for 100 MHz - 6 GHz and $\leq 50 \text{ mm}$, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:

[(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, where

- f(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 comparison

	Appendix A - SAR Test Exclusion Thresholds for 100 MHz - 6 GHz										
	and <u><</u> 50 mm										
MHz	5	10	15	20	25	30	35	40	45	50	mm
150	39	77	116	155	194	232	271	310	349	387	
300	27	55	82	110	137	164	192	219	246	274	
450	22	45	67	89	112	134	157	179	201	224	
835	16	33	49	66	82	98	115	131	148	164	
900	16	32	47	63	79	95	111	126	142	158	
1500	12	24	37	49	61	73	86	98	110	122	SAR Test Exclusion
1900	11	22	33	44	54	65	76	87	98	109	Thresholds (mW)
2450	10	19	29	38	48	57	67	77	86	96	
3600	8	16	24	32	40	47	55	63	71	79	
5200	7	13	20	26	33	39	46	53	59	66	
5400	6	13	19	26	32	39	45	52	58	65	
5800	6	12	19	25	31	37	44	50	56	62	



3. TABLE FOR FILED ANTENNA

For BT&LE:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)		
1	OSM GROUP	H10 2.45GH BT ANT	IFA PCB	N/A	-1.8		

Note: The antenna gain is provided by the manufacturer.

For 2.4G SRD:

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	OSM GROUP	H10 2.45GH BT ANT	IFA PCB	N/A	-1.8
2	OSM GROUP	H10 2.45GH BT ANT	IFA PCB	N/A	-1.8

Note:

(1) Smart antenna systems with two transmit/receive chains, but operating in a mode where only one transmit/receive chain is used.

(2) Both Ant.1 and Ant.2 had been tested, in this report only recorded the worst case.

(3) The antenna gain is provided by the manufacturer.

4. TEST RESULTS

Tune up tolerance (dBm)						
BT	LE	2.4G SRD				
≤ 4.50	≤ 5.20	≤ 4.50				

For BT:

Frequency (MHz)	Max Tune-up power (dBm)	Max Tune-up power (mW)	Result	Limit
2402.00	4.50	2.818	0.874	3.0

For LE:

Frequency (MHz)	Max Tune-up power (dBm)	Max Tune-up power (mW)	Result	Limit
2402.00	5.20	3.311	1.026	3.0

For 2.4G SRD:

Frequency (MHz)	Max Tune-up power (dBm)	Max Tune-up power (mW)	Result	Limit
2403.35	4.50	2.818	0.874	3.0

Note:

(1) Output power including tune up tolerance.

(2) No SAR evaluation required since transmitter power is below FCC threshold.

(3) The product can only use one of 2.4G and Bluetooth functions at a time, not at the same time.

End of Test Report