

Test Report Number: 4511904EMC04 Rev:0 Owlet Baby Care Inc. / Owlet Band Page: 1 of 5

# **RF Exposure Report**

Project Number: 4511904

Proposal Number: 9420

Revision Level: 0

Report Number: 4511904EMC04

Client: Owlet Baby Care Inc.

Equipment Under Test: Owlet Band Model / HVIN: OBB 1.0 FCC ID: 2AIEP-OBB1A

Applicable Standards: 47 CFR §§ 2.1093; FCC KDB 447498 D01 General RF Exposure Guidance v06

Report issued on: 15 November 2019 Result: Exempt

Evaluated by:

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Reviewed by:

David Schramm, EMC Manager

Remarks: This report details the results of the testing carried out on one sample, the results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

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### **1** General Information

#### 1.1 Client Information

Name: Owlet Baby Care Inc. Address: 2500 Executive Parkway Suite 500 City, State, Zip, Country: Lehi, UT 84043

#### 1.2 Test Laboratory

Name:SGS North America, Inc.Address:620 Old Peachtree Road NW, Suite 100City, State, Zip, Country:Suwanee, GA 30024, USA

Accrediting Body: A2LA Type of lab: Testing Laboratory Certificate Number: 3212.01

#### 1.3 General Information of EUT

Type of Product:	Pregnancy Wearable Device
Model:	OBB 1.0
Firmware Version ID Number:	V1
Serial Number:	NSN

FCC ID: 2AIEP-OBB1A IC: 21386-OBB1A

Frequency Range:	2402-2480 MHz
Data Modes:	GFSK (Bluetooth Low Energy)
Antenna P/N:	2450AT07A0100
Antenna Type:	Chip
Antenna Pk Gain:	1.0 dBi

DUT Rated Voltage:	3.7 Vdc (Battery)
DUT Test Voltage:	3.7 Vdc (Battery)
Charging Station Rated Voltage:	5 Vdc (USB)
Charging Station Test Voltage:	5 Vdc (USB)

Sample Received Date:	14 Oct 2019			
Dates of testing:	14 – 17 Oct 2019			



## **2** SAR Exclusion Calculations

The highest output power in conjunction with the Upper and Lower frequency boundaries have been used to demonstrate compliance.

The DUT is considered a Body Application.

447498 D01 General RF Exposure Guidance v06 SAR test exclusion calculations Section 4.3: General SAR test exclusion guidance / Section 4.3.1: Standalone SAR test exclusion considerations									
	Input Select Units								
Max Power:	-3.6	dBm							
Min separation distance:	5	mm							
Frequency, f:	2402	MHz							
Value reference Values used Number for Calculation Reference number definition									
v1	0	mW	[max. power of channel, including tune-up tolerance, mW] 'Rounded to nearest mW						
v2	5	mm	[min. test separation distance, mm] 'Rounded to nearest mm						
v3	1.550		[\f(GHz)]						
			$\leq$ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:						
			, mW) / (min. test separation distance, mm)] · [√f(GHz)] ≤ 3.0 for 1-g SAR, and ≤ 7.5 for 10-g extremity SAR,						
1g Exclusion Threshold:	9.7	mW	<= 3 * v2 / v3						
10g Exlusion Threshold:	24.2	mW	<== 7.5 * v2 / v3						
Conclusions:	The EUT m	ax power is l	BELOW the threshold. SAR Testing is NOT required for Body applications						
CONCluSIONS. The EUT max power is BELOW the threshold. SAR Testing is NOT required for Extremity applications									

#### 447498 D01 General RF Exposure Guidance v06 SAR test exclusion calculations

	Section 4.3: General SAR test exclusion guidance / Section 4.3.1: Standalone SAR test exclusion considerations										
	Input Select Units										
	Max Power:	-3.6	dBm								
Min separ	ration distance:	5	mm								
	Frequency, f:	2480	MHz								
v	alue reference	Value	s used	Reference	number definiti	ion					
	Number	for Cal	culation	Reference	Reference number definition						
	v1	0	mW	[max. power	max. power of channel, including tune-up tolerance, mW] 'Rounded to nearest mW						
	v2	5	mm	[min. test se	min. test separation distance, mm] 'Rounded to nearest mm						
	v3	1.575		[√f(GHz)]	(GHz)]						
a) For 100 MH	For 100 MHz to 6 GHz and test separation distances ≤ 50 mm, the 1-g and 10-g SAR test exclusion thresholds are determined by the following:										
[(max. powe	er of channel, incl	uding tune-u	ip tolerance,	mW) / (min.	mW) / (min. test separation distance, mm)] · [√f(GHz)] ≤ 3.0 for 1-g SAR, and ≤ 7.5 for 10-g extremity SAR,						
1g Eycli	usion Threshold:	9.5	mW	<== 3 * v	= 3 * v2 / v3						

<b>J</b>									
10g Exlusion Threshold:	23.8	mW	<== 7.5 * v2 /	′v3					
Conclusions	The EUT m	ax power is I	BELOW the thre	eshold. SAR Te	esting is NOT re	equired for Bod	applications		
Conclusions:	The EUT m	ax power is I	BELOW the thre	eshold. SAR Te	esting is NOT re	equired for Extre	emity applicatio	ns	



# 3 Revision History

Revision Level	Description of changes	Revision Date
Draft		4 November 2019
0	Initial release	15 Nov 2019