

Report No.: SZEM210200210804

Page: 1 of 6

## **SAR Evaluation Report**

**Application No.**: SZEM2102002108CR **Applicant:** SKULLCANDY, INC.

Address of Applicant: 6301 N Landmark Dr Park City UT 84098, Utah United States of America

Manufacturer: SKULLCANDY, INC.

Address of Manufacturer: 6301 N Landmark Dr Park City UT 84098, Utah United States of America

**Equipment Under Test (EUT):** 

**EUT Name:** Jib True/Jib True 2/Jib True XT 2

Model No.: S1JTW

Trade mark:

Skullcandy

FCC ID: Y22-S1JTW

Standards: 47 CFR Part 1.1307

47 CFR Part 2.1093

KDB447498D01 General RF Exposure Guidance v06

**Date of Receipt:** 2021-02-25

**Date of Test:** 2021-03-01 to 2021-03-17

**Date of Issue:** 2021-03-24

Test Result : PASS\*

Keny Xu EMC Laboratory Manager



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<sup>\*</sup> In the configuration tested, the EUT complied with the standards specified above.



Report No.: SZEM210200210804

Page: 2 of 6

## 2 Version

	Revision Record					
Version	Chapter	Date	Modifier	Remark		
01		2021-03-24		Original		

Authorized for issue by:		
	Benson Wond	
	Benson Wang/Project Engineer	
	Exic Fu	
	Eric Fu/Reviewer	



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Report No.: SZEM210200210804

Page: 3 of 6

### 3 Contents

			Page
1	COVE	ER PAGE	1
2	VERS	SION	2
3	CONT	TENTS	3
4	GENE	ERAL INFORMATION	4
	4.1	GENERAL DESCRIPTION OF EUT	4
	4.2	Test Location	5
		TEST FACILITY	
		DEVIATION FROM STANDARDS	
		ABNORMALITIES FROM STANDARD CONDITIONS	
	4.6	OTHER INFORMATION REQUESTED BY THE CUSTOMER	5
5	SAR	EVALUATION	6
	5.1	RF Exposure Compliance Requirement	6
	5.1.1	Standard Requirement	6
	5.1.2	Limits	6
	5.1.3	EUT RF Exposure	6



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Report No.: SZEM210200210804

Page: 4 of 6

### 4 General Information

## 4.1 General Description of EUT

Power supply:	Left earbuds: Li-lon Polymer Battery 3.7V 55mAh (Charge by travel case)		
	Right earbuds: Li-Ion Polymer Battery 3.7V 55mAh (Charge by travel case)		
	travel case with backup battery: Li-Ion Polymer Battery 3.7V 500mAh		
	(Charged by micro-usb port)		
Cable(s):	Micro-USB cable: 13cm unshielded		
For BT:			
Operation Frequency:	2402MHz to 2480MHz		
Bluetooth Version:	V5.0 Dual mode		
Modulation Type:	GFSK, pi/4DQPSK, 8DPSK		
Number of Channels:	79		
Channel Spacing:	1MHz		
Spectrum Spread Technology:	Frequency Hopping Spread Spectrum(FHSS)		
Antenna Type:	FPC Antenna		
Antenna Gain:	Left: 1.22dBi; Right: -0.15dBi		
For BLE:			
Operation Frequency:	2402MHz to 2480MHz		
Bluetooth Version:	V5.0 Dual mode		
Modulation Type:	GFSK		
Data Rate:	Only support 1M/bit		
Number of Channels:	40		
Channel Spacing:	2MHz		
Antenna Type:	FPC Antenna		
Antenna Gain:	Left: 1.22dBi; Right: -0.15dBi		



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Report No.: SZEM210200210804

Page: 5 of 6

#### 4.2 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

No. 1 Workshop, M-10, Middle section, Science & Technology Park, Shenzhen, Guangdong, China 518057

Telephone: +86 (0) 755 2601 2053 Fax: +86 (0) 755 2671 0594

No tests were sub-contracted.

### 4.3 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

#### A2LA (Certificate No. 3816.01)

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

#### VCCI

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

#### • FCC –Designation Number: CN1178

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1178. Test Firm Registration Number: 406779.

#### • Innovation, Science and Economic Development Canada

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006.

IC#: 4620C.

#### 4.4 Deviation from Standards

None.

#### 4.5 Abnormalities from Standard Conditions

None.

## 4.6 Other Information Requested by the Customer

None.



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Report No.: SZEM210200210804

Page: 6 of 6

### 5 SAR Evaluation

### 5.1 RF Exposure Compliance Requirement

#### 5.1.1 Standard Requirement

According to KDB447498D01 General RF Exposure Guidance v06

4.3.1. Standalone SAR test exclusion considerations

Unless specifically required by the published RF exposure KDB procedures, standalone 1-g head or body and 10-g extremity SAR evaluation for general population exposure conditions, by measurement or numerical simulation, is not required when the corresponding SAR Exclusion Threshold condition, listed below, is satisfied.

#### **5.1.2 Limits**

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)]  $\cdot$  [ $\sqrt{f(GHz)}$ ]  $\leq$  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<sup>17</sup>

The result is rounded to one decimal place for comparison

The test exclusions are applicable only when the minimum test separation distance is  $\leq$  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

#### 5.1.3 EUT RF Exposure

#### For BT/BLE:

For Left earbuds and Right earbuds

The Max. power (including tune-up tolerance) is 9.67 dBm on the middle channel 2.441 GHz (\*)

9.67 dBm logarithmic terms convert to numeric result is nearly 9.27 mW

According to the formula. calculate the test exclusion thresholds:

[(max. power of channel, including tune-up tolerance, mW)/(min. test separation distance, mm)] ·

General RF Exposure = (9.27 mW / 5 mm) x  $\sqrt{2.441}$  GHz = 2.90

(1)

SAR requirement:

 $S = 3.0 \tag{2}$ 

(1) < (2)

So the SAR report is not required.

(\*) Max. power refer to Report No.:SZEM210200210802

- End of the Report -



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