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## **SAR Evaluation Report**

Application No.:	SZEM1911020280CR(SGS SZ No.:T51910300019EM)	
Applicant:	Lucky Group (H.K.) Limited	
Address of Applicant:	Building B, Lucky Industrial Park, Hongjin Road, Hongmei Town, Dongguan, China	
Manufacturer:	Shenzhen Eliteduce Technology CO., Ltd	
Supplier:	Lucky Group (H.K.) Limited	
Buyer:	Dave and Buster's	
Equipment Under Test (EUT):		
EUT Name:	Spearker, Skull / Head Wireless	
Model No.:	18126 🐥	
*	Please refer to section 4.1 of this report which indicates which model was actually tested and which were electrically identical.	
P.O. / Ref. No.:	LBC90213, LBD90431	
Country of Origin:	China	
Country of Destination:	USA	
FCC ID:	2ACO3-18126-1	
Standards:	47 CFR Part 1.1307	
	47 CFR Part 2.1093	
	KDB447498D01 General RF Exposure Guidance v06	
Date of Receipt:	2019-11-18	
Date of Test:	2019-11-19 to 2019-12-12	
Date of Issue:	2019-12-17	
Test Result :	PASS*	

In the configuration tested, the EUT complied with the standards specified above.

Keny. Ku

Keny Xu EMC Laboratory Manager



\*

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## 2 Version

		Revision Record		
Version	Chapter	Date	Modifier	Remark
01		2019-12-17		Original

Authorized for issue by:		
	Gebin Sun	
	Gebin Sun /Project Engineer	
	Evic Fu	
	Eric Fu /Reviewer	_



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## 4 General Information

## 4.1 General Description of EUT

Power Supply:	Rechargeable battery DC3.7V, Charged by DC5V
Cable:	USB cable:45cm unshielded
	AUX IN cable:50cm unshielded
Operation Frequency:	2402MHz to 2480MHz
Bluetooth Version:	V5.0
Spectrum Spread Technology:	Frequency Hopping Spread Spectrum(FHSS)
Modulation Type:	GFSK, π/4DQPSK
Number of Channels:	79
Channel Spacing:	1MHz
Antenna Type:	Integral
Antenna Gain:	-0.85dBi

#### **Declaration of EUT Family Grouping:**

Model No.: 18126

Only the black sample was tested, since the electrical circuit design, layout, components used, internal wiring and functions were identical for the samples.



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## 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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## 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  $\leq$  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

The Max. power (including tune-up tolerance) is 4.67 dBm on the middle channel 2.441 GHz (\*) 4.67 dBm logarithmic terms convert to numeric result is nearly 2.93 mW According to the formula. calculate the test exclusion thresholds:

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

General $\overrightarrow{RF}$ Exposure = (2.93 mW / 5 mm) x $\sqrt{2.441}$ GHz = 0.92 SAR requirement:	(1)
S = 3.0	(2)
(1) < (2)	

So the SAR report is not required.

(\*) Max. power refer to Report No.:SZEM191102028002

#### - End of the Report -



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