

RF EXPOSURE REPORT

FOR

Applicant	:	DongGuan JinWenHua Digital Technology Co., Ltd.
Address	:	No.1 Huada Road, Longbeiling Industry Zone, Tangxia Town, Dongguan City, China
Equipment under Test	:	Portable Wireless Speakers
Model No.	:	C27/Red-E Go, c27a, c27b, c27c, c27w, c27y, c27r, c27g
Trade Mark	:	N/A
FCC ID	:	2AFSG-C27
Manufacturer	:	DongGuan JinWenHua Digital Technology Co., Ltd.
Address	:	No.1 Huada Road, Longbeiling Industry Zone, Tangxia Town, Dongguan City, China

Issued By: Dongguan Dongdian Testing Service Co., Ltd.

Add.: No. 17, Zongbu Road 2, Songshan Lake Sci&Tech, Industry Park,
Dongguan City, Guangdong Province, China, 523808

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Test Report Declare

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Address	:	No.1 Huada Road, Longbeiling Industry Zone,Tangxia Town, Dongguan City, China

Standard Used: KDB447498 D01 General RF Exposure Guidance v06

We Declare:

The equipment described above is assessed by Dongguan Dongdian Testing Service Co., Ltd. and in the configuration assessed the equipment complied with the standards specified above. The assessed results are contained in this report and Dongguan Dongdian Testing Service Co., Ltd. is assumed of full responsibility for the accuracy and completeness of these assess.

After evaluation, our opinion is that the equipment In Accordance with above standard.

Report No.:	DDT-RE23061523-2E02		
Date of Receipt:	Jul. 03, 2023	Date of Test:	Jul. 03, 2023 ~ Aug. 07, 2023

Prepared By:

Jacky Huang

Jacky Huang/Engineer

Approved By:

Damon Hu

Damon Hu/EMC Manager

Note: This report applies to above tested sample only. This report shall not be reproduced in parts without written approval of Dongguan Dongdian Testing Service Co., Ltd.

Revision History

Rev.	Revisions	Issue Date	Revised By
---	Initial issue	Aug. 07, 2023	

1. General Information

1.1. Description of equipment

EUT Name	: Portable Wireless Speakers
Model Number	: C27/Red-E Go, c27a, c27b, c27c, c27w, c27y, c27r, c27g
Model Difference	: All models are identical except the Bluetooth name and model number, therefore the test performed on the model C27/Red-E Go.
EUT function description	: Please reference user manual of this device
Power Supply	: DC 5V by Type-C port : DC 3.7V Polymer Li-ion built-in battery
Radio Specification	: Bluetooth V5.3
Operation Frequency	: 2402 MHz - 2480 MHz
Modulation	: GFSK, $\pi/4$ -DQPSK
Data Rate	: 1 Mbps, 2 Mbps
Antenna	: PCB antenna, maximum PK gain: -0.58 dBi
Sample Number	: S23061523-06 for conductive : S23061523-07 for radiation

1.2. Assess laboratory

Dongguan Dongdian Testing Service Co., Ltd.

Add.: No. 17, Zongbu Road 2, Songshan Lake Sci&Tech, Industry Park, Dongguan City, Guangdong Province, China, 523808.

Tel.: +86-0769-38826678, <http://www.dgddt.com>, Email: ddt@dgddt.com.

CNAS Accreditation No. L6451; A2LA Accreditation Number: 3870.01

FCC Designation Number: CN1182, Test Firm Registration Number: 540522

Innovation, Science and Economic Development Canada Site Registration Number: 10288A

Conformity Assessment Body identifier: CN0048

VCCI facility registration number: C-20087, T-20088, R-20123, R-20155, G-20118

2. RF Exposure evaluation for FCC

According to 447498 D01 General RF Exposure Guidance v06

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:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ 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 comparison

Manufacturing Tolerance

BT

GFSK (Peak)			
Channel	Channel 0	Channel 39	Channel 78
Target (dBm)	-3.03	-2.64	-2.60
Tolerance \pm (dB)	1.50	1.50	1.50
$\pi/4$ DQPSK (Peak)			
Channel	Channel 0	Channel 39	Channel 78
Target (dBm)	-2.10	-1.70	-1.67
Tolerance \pm (dB)	1.50	1.50	1.50

Estimation Result

Worse case is as below: [2480 MHz, -0.17 dBm, (0.96 mW) output power]

$(0.96/5) \cdot [\sqrt{2.480(\text{GHz})}] = 0.30 < 3.0$ for 1-g SAR

Then SAR evaluation is not required.

END OF REPORT