

TEST REPORT

Product Name : LED RECORD PLAYER SPEAKER
Model Number : SP-0088-B
FCC ID : 2ADM5-SP-0088B

Prepared for : Zeeva International Limited
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Report Number : EDG2303170182E00102R
Date(s) of Tests : March 17, 2023 to April 04, 2023
Date of issue : April 04, 2023

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1. TEST RESULT CERTIFICATION

Applicant : Zeeva International Limited

Address : Suite 1007B, 10th Floor, Exchange Tower, 33 Wang Chiu Road, Kowloon Bay, Hong Kong, China

Manufacturer : Zeeva International Limited

Address : Suite 1007B, 10th Floor, Exchange Tower, 33 Wang Chiu Road, Kowloon Bay, Hong Kong, China

EUT : LED RECORD PLAYER SPEAKER

Model Name : SP-0088-B

Trademark : N/A

Measurement Procedure Used:

APPLICABLE STANDARDS	
STANDARD	TEST RESULT
FCC 1.1310: §1.1307(b)	PASS

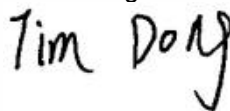
The above equipment was tested by EMTEK(DONGGUAN) CO., LTD. The test data, data evaluation, test procedures, and equipment configurations shown in this report were made in accordance with the procedures given in ANSI C63.10 (2013) and the energy emitted by the sample EUT tested as described in this report is in compliance with the requirements of FCC Rules FCC 1.1310: §1.1307(b).

The test results of this report relate only to the tested sample identified in this report

Date of Test : March 17, 2023 to April 04, 2023

Prepared by : 

Xia Yang /Editor

Reviewer : 

Tim Dong/ Supervisor

Approve & Authorized Signer :  

Sam Lv / Manager

Modified History

Version	Report No.	Revision Date	Summary
	EDG2303170182E00102R	/	Original Report



2. EUT Specification

Characteristics	Description
Product:	LED RECORD PLAYER SPEAKER
Model Number:	SP-0088-B
Sample:	3#
SKU#:	9075479
UPC#:	1922344924578
Color:	NONE
Device Type:	Bluetooth V5.3
Data Rate:	1Mbps for GFSK modulation 2Mbps for $\pi/4$ -DQPSK modulation
Modulation:	GFSK, $\pi/4$ -DQPSK
Operating Frequency Range(s) :	2402-2480MHz
Number of Channels:	79 channels
Transmit Power Max:	-2.10 dBm(0.000617W)
Antenna Type:	PCB Antenna
Antenna Gain:	-0.58 dBi
Power supply:	DC 5V from USB
Evaluation applied:	☒ MPE Evaluation ☐ SAR Evaluation

3. Test Requirement:

RF EXPOSURE EVALUATION

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency(RF) Radiation as specified in §1.1307(b)

Limits for Maximum Permissible Exposure (MPE)

Frequency Range(MHz)	Electric Field Strength(V/m)	Magnetic Field Strength(A/m)	Power Density(mW/cm ²)	Average Time
(A) Limits for Occupational/Control Exposures				
300-1500	--	--	F/300	6
1500-100000	--	--	5	6
(B) Limits for General Population/Uncontrol Exposures				
300-1500	--	--	F/1500	6
1500-100000	--	--	1	30

Friis transmission formula: $P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot R^2)$

Where

P_d = Power density in mW/cm²

P_{out} =output power to antenna in mW

G = Numeric gain of the antenna relative to isotropic antenna

π =3.1416

R = distance between observation point and center of the radiator in cm

P_d the limit of MPE, 1mW/cm². If we know the maximum gain of the antenna and total power input to the antenna, through the calculation, we will know the distance where the MPE limit is reached.

4. Measurement Result

Antenna gain: -0.58 dBi

Mode	Frequency (MHz)	Output Power (dBm)	Target Power W/tolerance (dBm)	Max tune up power tolerance (dBm)	Max tune up power tolerance (mW)	Power Density at R=20cm (mW/cm ²)	Limit (mW/cm ²)	Verdict
GFSK	2402	-2.8	-3±1	-2	0.63	0.000110	1.0	PASS
	2441	-3.1	-4±1	-3	0.50	0.000087	1.0	PASS
	2480	-4.35	-5±1	-4	0.40	0.000069	1.0	PASS
pi/4-DQPSK	2402	-2.1	-3±1	-2	0.63	0.000110	1.0	PASS
	2441	-2.44	-3±1	-2	0.63	0.000110	1.0	PASS
	2480	-3.71	-4±1	-3	0.50	0.000087	1.0	PASS
	2441	-2.24	-3±1	-2	0.63	0.000110	1.0	PASS
	2480	-2.14	-3±1	-2	0.63	0.000110	1.0	PASS

*** End of Report ***