TEST REPORT

Product Name	**:**	**Bluetooth Karaoke & Microphone with EZ Link + Technology - Karaoke**
Model Number	**:**	**Di-565, M1 – 565 M2M3M4M5M6M7M8M9M10 (M1 – M10, please refer to model no. table)**
FCC ID	**:**	**EMO565A**

Prepared for	:	SDI Technologies Inc.
Address	:	1299, Main Street, Rahway, NJ 07065, U.S.A.
Prepared by	:	EMTEK (DONGGUAN) CO., LTD.
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1. TEST RESULT CERTIFICATION

Applicant	:	SDI Technologies Inc.
Address	:	1299, Main Street, Rahway, NJ 07065, U.S.A.
Manufacturer	:	eKids, LLC. / KIDDESIGNS INC.
Address	:	1299, Main Street, Rahway, NJ 07065, U.S.A.
Factory	:	DongGuan Synst Electronics Co., Ltd.
Address	:	No. 20, Fudong Road, Houjie Town, Dong-Guang City, Guangdong Province, China
EUT	:	Bluetooth Karaoke & Microphone with EZ Link + Technology - Karaoke
Model Name	:	Di-565, M1 – 565 M2M3M4M5M6M7M8M9M10 (M1 – M10, please refer to model no. table)
Trademark	:	eKids, iHome

Measurement Procedure Used:

APPLICABLE STANDARDS	
STANDARD	**TEST RESULT**
§ 15.247(i), § 2.1093	**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 § 15.247(i), § 2.1093.

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

Date of Test : _____

Prepared by : Xia Yang _____
Xia Yang /Editor

Reviewer : Tim Dong _____
Tim Dong/ Supervisor

Approve & Authorized Signer : _____
Sam Lv / Manager

Modified History

Version	Report No.	Revision Date	Summary
	EDG2303300218E00402R	/	Original Report

2. EUT Specification

Characteristics	Description
Product:	Bluetooth Karaoke & Microphone with EZ Link + Technology - Karaoke
Model Number:	Di-565, M1 – 565 M2M3M4M5M6M7M8M9M10 (M1 – M10, please refer to model no. table) All products are the same, only the model number and color of appearance are different Here we selected Di-565 for all the test
Sample:	1#
Device Type:	Bluetooth V5.1
Data Rate:	1Mbps for GFSK modulation 2Mbps for π/4-DQPSK modulation 3Mbps for 8DPSK modulation
Modulation:	GFSK, π/4-DQPSK, 8DPSK
Operating Frequency Range(s) :	2402-2480MHz
Number of Channels:	79 channels
Transmit Power Max:	4.61 dBm(0.002891W)
Antenna Gain:	-0.58 dBi
Power supply:	DC 5V from USB, DC 3.7V from battery
Evaluation applied:	☐ MPE Evaluation ☒ SAR Evaluation

Model: M_1 – 565 $M_2M_3M_4M_5M_6M_7M_8M_9M_{10}$ *($M_1 - M_{10}$, please refer to model no. table)*

Model no. table

Part of model #	M_1	M_2	M_3	M_4	M_5	M_6	M_7	M_8	M_9	M_{10}
Number of digit(s)	2 to 3	2	1	1	1 to 2	1	1 to 3	1 to 4	2	1
Description	2 to 3 digits alphabets combination by "a" – "Z" for brand	1 to 2 digits alphabets combination by "a" – "Z" special character version *Or* *blank*	"." *Or* *blank*	"U" for Europe version *Or* *blank*	"E" for English content *Or* "F" for English & French *Or* "3" for 3 language version *Or* "5" for 5 languages version *Or* "11" for Europe version with 11 languages	"X" for no sound effect *Or* "E" for having sound effect or speech effect *Or* "M" for having sound effect (Music)	"0"-"9" for year version *Or* "V0" – "V99" for year version	"M" for Movie version brand *Or* *blank*	"AK" for Walmart exclusive *Or* *"AP" for Apple exclusive* *Or* *"KS" for Kohl's exclusive* *Or* *"TG" for Target exclusive* *blank*	"i" for inner carton required *Or* "z" for direct to consumer on-line packaging *Or* "OL" for Amazon packaging *Or* *blank*

3. Test Requirement

RF EXPOSURE EVALUATION

According to §15.247(i) and §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

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*)] · [$\sqrt{f_{(GHz)}}$] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR,[24] where

- $f_{(GHz)}$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation[25]
- The result is rounded to one decimal place for comparison
- 3.0 and 7.5 are referred to as the numeric thresholds in the step 2 below

The test exclusions are applicable only when the minimum *test separation distance* is ≤ 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 according to 5) in section 4.1 is applied to determine SAR test exclusion.

Routine SAR evaluation refers to that specifically required by § 2.1093, using measurements or computer simulation. When routine SAR evaluation is not required, portable transmitters with output power greater than the applicable low threshold require SAR evaluation to quality for TCB approval.
One antenna is available for the EUT. The minimum separation distance is 5mm.

4. Measurement Result

Antenna gain: -0.58 dBi
When a single module works, the measurement results are as follows:
BT1

Transmit Frequency (MHz)	Mode	Measured Power (dBm)	E.I.R.P (dBm)	Tune upPower (dBm)	Max tune up power (dBm)	Calculation Result
2402	GFSK	3.44	2.86	3±1	4	0.7786038
2441	GFSK	3.63	3.05	3±1	4	0.7848992
2480	GFSK	3.26	2.68	3±1	4	0.7911445
2402	Π/4-DQPSK	4.15	3.57	4±1	5	0.9802041
2441	Π/4-DQPSK	4.28	3.70	4±1	5	0.9881295
2480	Π/4-DQPSK	3.89	3.31	3±1	4	0.7911445
2402	8DPSK	4.43	3.85	4±1	5	0.9802041
2441	8DPSK	4.61	4.03	4±1	5	0.9881295
2480	8DPSK	4.18	3.60	4±1	5	0.9959920

According to KDB 447498, no stand-alone required for BT antenna, and no simultaneous SAR measurement is required.

*** End of Report ***