TEST REPORT

Product Name	**:**	**Bluetooth Bedside Alarm Clock with USB Charging**
Model Number	**:**	**iOP235, iOP235W, iOP235X(X could be single or multiple digits by any alphabets and punctuation marks denoting different year version, buyers and cabinet colors)**
FCC ID	**:**	**EMOIOP235B**

Prepared for	:	SDI Technologies Inc.
Address	:	1299, Main Street, Rahway, NJ 07065, U.S.A.
Prepared by	:	EMTEK (DONGGUAN) CO., LTD.
Address	:	-1&2/F.,Building 2, Zone A, Zhongda Marine Biotechnology Research and Development Base, No.9, Xincheng Avenue, Songshanhu High-technology Industrial Development Zone, Dongguan, Guangdong, China TEL: +86-0769-22807078 FAX: +86-0769-22807079

Report Number	:	EDG2307270177E00402R
Date(s) of Tests	:	August 07, 2023 to August 15, 2023
Date of issue	:	August 15, 2023

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1. TEST RESULT CERTIFICATION

Applicant	:	SDI Technologies Inc.
Address	:	1299, Main Street, Rahway, NJ 07065, U.S.A.
Manufacturer	:	SDI Technologies Inc.
Address	:	1299, Main Street, Rahway, NJ 07065, U.S.A.
Factory	:	WAI HANG ELECTRONIC CO LTD
Address	:	Room 1807-1808, 18/F., New Trade Plaza, Block B, 6 On Ping Street, Siu Lek Yuen, Shatin, NT., Hong Kong
EUT	:	Bluetooth Bedside Alarm Clock with USB Charging
Model Name	:	iOP235, iOP235W, iOP235X(X could be single or multiple digits by any alphabets and punctuation marks denoting different year version, buyers and cabinet colors)
Trademark	:	iHome

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 : August 07, 2023 to August 15, 2023

Prepared by : Warren Deng /Editor

Reviewer : Tim Dong /Supervisor

Approve & Authorized Signer : Sam Lv /Manager

Modified History

Version	Report No.	Revision Date	Summary
	EDG2307270177E00402R	August 15, 2023	Original Report

2. EUT Specification

Characteristics	Description
Product:	Bluetooth Bedside Alarm Clock with USB Charging
Model Number:	iOP235, iOP235W, iOP235X(X could be single or multiple digits by any alphabets and punctuation marks denoting different year version, buyers and cabinet colors) All products are the same, only the model number and color of appearance are different. Here we selected iOP235 for all the test.
Sample:	1#
Device Type:	Bluetooth V5.3
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:	3.06 dBm(0.002023 W)
Antenna Gain:	0 dBi
Power supply:	DC 5V from Adapter
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: Pd= (Pout*G)\ (4*pi*R^2)

Where

Pd= Power density in mW/cm^2

Pout=output power to antenna in mW

G= Numeric gain of the antenna relative to isotropic antenna

Pi=3.1416

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

Pd the limit of MPE, $1mW/cm^2$. If we know the maximum gain of the nd 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 dBi

Mode	Frequency (MHz)	Output Power (dBm)	E.I.R.P (dBm)	Target Power W/tolerance (dBm)	Max tune up power tolerance (dBm)	Max tune up power tolerance (mW)	Power Density at R=20cm (mW/cm2)	Limit (mW/cm2)	Verdict
GFSK	2402	2.1	2.1	2±1	3	2.00	0.000397	1	PASS
	2441	1.43	1.43	1±1	2	1.58	0.000315	1	PASS
	2480	0.94	0.94	0±1	1	1.26	0.000250	1	PASS
pi/4-DQPSK	2402	2.69	2.69	2±1	3	2.00	0.000397	1	PASS
	2441	2.02	2.02	2±1	3	2.00	0.000397	1	PASS
	2480	1.62	1.62	1±1	2	1.58	0.000315	1	PASS
8-DPSK	2402	3.06	3.06	3±1	4	2.51	0.000500	1	PASS
	2441	2.3	2.3	1±1	3	2.00	0.000397	1	PASS
	2480	1.89	1.89	1±1	2	1.58	0.000315	1	PASS

*** End of Report ***