RF Exposure Evaluation Report

Product	:	Bluetooth Device
Trade mark	:	SEEKCY
Model/Type reference	:	S7U
Serial Model	:	/
Report Number	:	EED39N00022302
FCC ID	:	2AIWM-000003
Date of Issue	:	Apr 21, 2021

Test Standards	Results
☒ FCC Rules 47 CFR §2.1091	PASS
☒ KDB 447498 D01v06	PASS

Prepared for:

Suzhou Seekcy Electronic Technology Co.,Ltd.
A-401,Building 16,SISPA,NO.328,Xinghu Street,Suzhou Industrial Park Jiangsu

Prepared by:

Centre Testing International (Suzhou) CO., LTD.
Building 18, Zhihui New Town Ecological Industrial Park, No. 1206, Jinyang East Road, Lujia Town, Kunshan, Jiangsu, China
TEL: +86-0512-5015 8288

Compiled by:	Jenny. Yu	Reviewed by:	Janes. Yan
Approved by:	Jeff Fang	Date:	Apr 21, 2021

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Modification Record

No.	Last Report No.	Modification Description
1	EED39N00022302	First report

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1 General Information

1.1 Client Information

Applicant:	Suzhou Seekcy Electronic Technology Co.,Ltd.
Address of Applicant:	A-401,Building 16,SISPA,NO.328,Xinghu Street,Suzhou Industrial Park Jiangsu
Manufacturer:	Suzhou Seekcy Electronic Technology Co.,Ltd.
Address of Manufacturer:	A-401,Building 16,SISPA,NO.328,Xinghu Street,Suzhou Industrial Park Jiangsu

1.2 General Description of EUT

Product Name:	Bluetooth Device
Model No.(EUT):	S7U
Trade Mark:	SEEKCY
EUT Supports Radios application:	Bluetooth V5.0 BLE
Power Supply:	Input: DC 3.6V Battery: DC3.6V (Lithium battery)
Sample Received Date:	Apr 07, 2021
Sample tested Date:	Apr 07, 2021 to Apr 19, 2021

1.3 Product Specification subjective to this standard

Frequency Range:	Bluetooth V5.0 BLE
Antenna Type:	PCB antenna
Antenna gain:	5.0dBi
Power Supply:	Input: DC 3.6V Battery: DC3.6V (Lithium battery)
Max Conducted Output Power:	BLE:0.88dbm
	The Max Conducted Output Power data refer to the report EED39N00022301.
Sample Received Date:	Apr 07, 2021
Sample tested Date:	Apr 07, 2021 to Apr 19, 2021

1.4 Test Location

All test facilities used to collect the test data are located at Building 18, Zhihui New Town Ecological Industrial Park, No. 1206, Jinyang East Road, Lujia Town, Kunshan, Jiangsu, China.

1.5 Test Facility

The test facility is recognized, certified, or accredited by the following organizations:

A2LA-Lab Cert. No. 5734.01

Centre Testing International (Suzhou) CO., LTD. EMC Laboratory has been accredited by A2LA for technical competence in the field of electrical testing, and proved to be in compliance with ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration. Laboratories and any additional program requirements in the identified field of testing.

FCC-Designation No.:CN1290

Centre Testing International Group Co., Ltd EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The American association for Centre Testing International Group Co., Ltd. EMC laboratory accreditation Designation No.:CN1290

1.6 Deviation from Standards

None.

1.7 Abnormalities from Standard Conditions

None.

1.8 Other Information Requested by the Customer

None.

2 RF Exposure Evaluation

2.1 RF Exposure Compliance Requirement

2.1.1 Limits

According to FCC Part1.1310: 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 part1.1307(b)

Limits For Maximum Permissible Exposure(MPE)

Frequency Range (MHz)	Electric field strength (V/m)	Magentic field strength (A/m)	Power density (Mw/CM^2)	Averaging time (minutees)
(A)Limits for Occupational/Controlled Exposures				
0.3 ~ 3.0	614	1.63	100	6
3.0 ~ 30	1842/f	4.89/f	$900/f^2$	6
30 ~ 300	61.4	0.163	1.0	6
300 ~ 1500	---	---	f/300	6
1500 ~ 100000	---	---	5	6
(B)Limits for General Population/Uncontrolled Exposure				
0.3 ~ 1.34	614	1.63	100	30
1.34 ~ 30	824/f	2.19/f	$180/f^2$	30
30 ~ 300	27.5	0.073	0.2	30
300 ~ 1500	---	---	f/1500	30
1500 ~ 100000	---	---	1.0	30

A rough estimation of the expected exposure in power flux density on a given point can be made with the
following equation:

$$S = \frac{P \times G}{4 \times \pi \times R^2}$$

Where:
S = power density
P = power input to the antenna
G = numeric gain of the antenna in the direction of interest relative to an isotropic radiator
R= distance to the centre of radiation of the antenna
EIRP = P*G

The antenna of the product, under normal use condition is at least 20 cm away from the body of the user.
Warning statement to the user for keeping at least 20cm separation distance and the pr ohibition of operating to
a person has been printed on the user's manual. Therefore, the S of the device is calcul ated with R=20cm,
and if it is below the limit S, then we can conclude the device complies with the rules.

2.1.2 Test Procedure

Software provided by client enabled the EUT to transmit data at lowest, middle and highest channel individually.

2.1.3 EUT RF Exposure Evaluation

Output Power Into Antenna & RF Exposure Evaluation Distance:

Channel	Frequency (MHz)	Max Conducted Output Power(dBm)	Gain (dBi)	EIRP* (dBm)	EIRP (mW)	R (cm)	S (mW/cm^2)	Limit (mW/cm^2)	Result
BLE	2440	0.88	5.0	5.88	3.87	20	0.00077	1.0	Pass

Only the BLE can transmitting at frequency 2.4GHz band. The maximum rate of MPE is 0.00077<=1.0. According to the KDB447498 section 7.2 determine the device is exclusion from SAR test.

APPENDIX 1 PHOTOGRAPHS OF EUT CONSTRUCTIONAL DETAILS

Refer to Report No. EED39N00022301 for EUT external and internal photos.

The testing data and results in this report are just for scientific research, education, internal quality control and product development etc.

*** End of Report ***