TEST REPORT

Product Name	**:**	**RF Module**
Model Number	**:**	**CX105-A**
FCC ID	**:**	**2ASLRCX105-A**

Prepared for	:	Shenzhen Kaifa Technology(Chengdu) Co.,Ltd.
Address	:	No. 99 Tianquan Rd., Hi-Tech Development Zone, Chengdu, P.R.C.
Prepared by	:	EMTEK (DONGGUAN) CO., LTD.
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Report Number	:	EDG2312080186E00103R
Date(s) of Tests	:	December 08, 2023 to July 26, 2024
Date of issue	:	July 26, 2024

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1. TEST RESULT CERTIFICATION

Applicant	:	Shenzhen Kaifa Technology(Chengdu) Co.,Ltd.
Address	:	No. 99 Tianquan Rd., Hi-Tech Development Zone, Chengdu, P.R.C.
Manufacturer	:	Shenzhen Kaifa Technology(Chengdu) Co.,Ltd.
Address	:	No. 99 Tianquan Rd., Hi-Tech Development Zone, Chengdu, P.R.C.
Factory	:	Shenzhen Kaifa Technology(Chengdu) Co.,Ltd.
Address	:	No. 99 Tianquan Rd., Hi-Tech Development Zone, Chengdu, P.R.C.
EUT	:	RF Module
Model Name	:	CX105-A
Trademark	:	N/A

Measurement Procedure Used:

APPLICABLE STANDARDS	
STANDARD	**TEST RESULT**
§ 15.247(i), § 2.1093,1.1307(b)(1)	**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, 1.1307(b)(1).
The test results of this report relate only to the tested sample identified in this report

Date of Test : December 08, 2023 to July 26, 2024

Prepared by : Warren Deng /Editor

Reviewer : Tim Dong /Supervisor

Approve & Authorized Signer : Sam Lv / Manager

Modified History

Version	Report No.	Revision Date	Summary
	EDG2312080186E00103R	/	Original Report

2. EUT Specification

Characteristics	Description
Product:	RF Module
Model Number:	CX105-A
Sample:	2#
Device Type:	BLE, SRD
Modulation:	GFSK for BLE FSK for SRD
Operating Frequency Range(s) :	2402-2480 MHz for BLE 902-928 MHz for SRD
Number of Channels:	40 channels for BLE 129 channels for SRD
Transmit Power Max:	5.60 dBm(0.003631 W) for BLE
Antenna Gain:	3.68 dBi for BLE -2.62 dBi for SRD
Power supply:	DC 3.3V
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:
902-928: -2.62 dBi
2402-2480:3.68 dBi

SRD

Channel	Frequency (MHz)	Output Power(dBm)	E.I.R.P (dBm)	Target Power W/tolerance (dBm)	Max tune up power(dBm) tolerance	Max tuneup power(mW) tolerance	Power Density at R=20cm (mW/cm2)	Power density Limits (mW/cm2)
1	902.2	25.66	22.81	25±1	26	398.11	0.041089	0.6
8	915	25.4	22.55	25±1	26	398.11	0.041089	0.61
15	927.8	24.8	21.95	24±1	25	316.23	0.032638	0.62

BLE

Mode	Frequency (MHz)	Output Power(dBm)	E.I.R.P(dBm)	Target Power W/tolerance (dBm)	Max tune up power(dBm) tolerance	Max tuneup power(mW) tolerance	Power Density at R=20cm (mW/cm2)	Limit (mW/cm2)
1M	2402	3.03	6.71	6±1	7	5.01	0.002327	1
	2440	2.77	6.45	6±1	7	5.01	0.002327	1
	2480	3.34	7.02	7±1	8	6.31	0.002929	1
2M	2402	3.05	6.73	6±1	7	5.01	0.002327	1
	2440	2.76	6.44	6±1	7	5.01	0.002327	1
	2480	3.4	7.08	7±1	8	6.31	0.002929	1

*** End of Report ***