

MPE REPORT

Report No.: SRTC2022-9004(F)-22060101(I)

Product Name: MK8000_EVB

Product Model: MK8000_LGA40

Applicant: Beijing Hanwei Innovation Technology Corporation Limited

Manufacturer: Beijing Hanwei Innovation Technology Corporation Limited

Specification: KDB 4747498 D04

FCC ID: 2A7T8MK8000UWBA

The State Radio_monitoring_center Testing Center (SRTC)

15th Building, No.30 Shixing Street, Shijingshan District, Beijing, P.R.China

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1 GENERAL INFORMATION

1.1 Notes of the test report

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1.2 Information about the testing laboratory

Company:	The State Radio_monitoring_center Testing Center (SRTC)
Test Site 1:	15th Building, No.30 Shixing Street, Shijingshan District
Test Site 2:	No.80, Zhaojiachang, Beizang, Daxing District
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Country or Region:	P.R.China
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1.3 Applicant's details

Company:	Beijing Hanwei Innovation Technology Corporation Limited
Address:	28 Chengfu Road, Suite 4-1103, 11/F, Haidian District, Beijing, CHINA

1.4 Manufacturer's details

Company:	Beijing Hanwei Innovation Technology Corporation Limited
Address:	28 Chengfu Road, Suite 4-1103, 11/F, Haidian District, Beijing, CHINA

1.5 Test environment

Date of Receipt of test sample at SRTC:	2022.04.11	
Testing Start Date:	2022.06.04	
Testing End Date:	2022.08.05	
Environmental Data:	Temperature (°C)	Humidity (%)
Ambient	23	35
Normal Supply Voltage (V d.c.):	3.0	

2 DESCRIPTION OF THE DEVICE UNDER TEST

2.1 Final Equipment Build Status

Frequency Range	Band1: 3494.4/3993.6/4492.8 MHz Band 3: 6489.6/6988.8/7488.0 MHz Band 6: 7987.2/8486.4/8985.6 MHz
Modulation	BPM/BPSK
Antenna Type	Antenna Mode 1: Single antenna Antenna Mode 2: Array antenna
Antenna Gain	The antenna is integrated with the module.
Power Supply	Battery
Rated Power Supply Voltage	3V
HW Version	V1.2
SW Version	V1.0
Sample Serial Number	Antenna Mode 1: 001 Antenna Mode 2: 002

Note: According to the Peak Power Density test of the two antenna mode, the Antenna Mode 1 results are worse, so other test items use Antenna Mode 1 for testing.

3 REFERENCE SPECIFICATION

Specification	Version	Title
447498 D04	2021	RF Exposure Procedures and Equipment Authorization Policies for Mobile and Portable Devices

4 RESULT SUMMARY

No.	Test case	FCC reference
1	MPE Calculation	FCC KDB447498 D04

This Test Report Is Issued by: Mr. Peng Zhen 	Checked by: Mr. Li Bin 
Tested by: Ms. Li Jin 	Issued date: 20220815

5 TEST RESULTS

5.1 Output Power Test Result

Band 1

Test Frequency (MHz)	Measured EIRP (dBm)	Limit (dBm)	Margin (dB)	Verdict
3494.4	-43.83	-41.30	2.53	Pass
3993.6	-44.00	-41.30	2.70	Pass
4492.8	-43.40	-41.30	2.10	Pass

Band 3

Test Frequency (MHz)	Measured EIRP (dBm)	Limit (dBm)	Margin (dB)	Verdict
6489.6	-42.66	-41.30	1.36	Pass
6988.8	-42.70	-41.30	1.40	Pass
7488.0	-42.54	-41.30	1.24	Pass

Band 6

Test Frequency (MHz)	Measured EIRP (dBm)	Limit (dBm)	Margin (dB)	Verdict
7987.2	-42.62	-41.30	1.32	Pass
8486.4	-41.93	-41.30	0.63	Pass
8985.6	-42.68	-41.30	1.38	Pass

5.2 Calculation result

According to KDB447498 D04, a single RF source is exempt RF device (from the requirement to show data demonstrating compliance to RF exposure limits, as previously mentioned) if the available maximum time-averaged power is no more than 1 mW, regardless of separation distance.

This exemption applies to all operating configurations and exposure conditions, for the frequency range 100 kHz to 100 GHz, regardless of fixed, mobile, or portable device exposure conditions. This is a standalone exemption, and it cannot be applied in conjunction with any other test exemption.

Band 1

Test Frequency (MHz)	Measured EIRP (dBm)	Measured EIRP (mW)	Limit (mW)	Verdict
3494.4	-43.83	0.000041400	1	Pass
3993.6	-44.00	0.000039811	1	Pass
4492.8	-43.40	0.000045709	1	Pass

Band 3

Test Frequency (MHz)	Measured EIRP (dBm)	Measured EIRP (mW)	Limit (mW)	Verdict
6489.6	-42.66	0.000054200	1	Pass
6988.8	-42.70	0.000053703	1	Pass
7488.0	-42.54	0.000055719	1	Pass

Band 6

Test Frequency (MHz)	Measured EIRP (dBm)	Measured EIRP (mW)	Limit (mW)	Verdict
7987.2	-42.62	0.000054702	1	Pass
8486.4	-41.93	0.000064121	1	Pass
8985.6	-42.68	0.000053951	1	Pass