TEST REPORT

Product Name : DW 9100 MS
Model Number : JF-91
FCC ID : GDDJF-912

Prepared for	:	Cherry Europe GmbH
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Prepared by	:	EMTEK (SHENZHEN) Co., Ltd.
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Date of sample receipt	:	April 01, 2025
Date(s) of Tests	:	April 01, 2025 to April 23, 2025
Date of issue	:	April 23, 2025

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1. TEST RESULT CERTIFICATION

Applicant	:	Cherry Europe GmbH
Address	:	Cherrystraße 2, 91275 Auerbach i. d. OPf.
Manufacturer	:	Zhu hai Cherry Electronics Co., Ltd
Address	:	No.8, Jinyuan 1st Road, Tangjiawan Town, High Tech Industial Zone, Zhuhai City,Guangdong Province,P.R.of China
EUT	:	DW 9100 MS
Model Name	:	JF-91
Trademark	:	N/A

Measurement Procedure Used:

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

The above equipment was tested by EMTEK(SHENZHEN) 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 : April 01, 2025 to April 23, 2025

Prepared by : Una Yu /Editor

Reviewer : Joe Xia/Supervisor

Approve & Authorized Signer : Lisa Wang/Manager

Modified History

Version	Report No.	Revision Date	Summary
	ENS2506060233W00202R	/	Original Report

2. EUT Specification

Characteristics	Description
Product:	DW 9100 MS
Model Number:	JF-91
Sample:	1#
Data Rate:	BLE: 1Mbps for GFSK modulation 2Mbps for GFSK modulation SRD: 1Mbps for GFSK modulation
Modulation:	BLE: GFSK SRD: GFSK
Operating Frequency Range(s) :	2402-2480MHz
Number of Channels:	40 channels
Transmit Power Max:	-2.81 dBm(0.000524 W) for BLE -3.13 dBm(0.000486 W) for SRD
Antenna Gain:	3.49 dBi
Power supply:	DC 3.7V from battery, DC 5V from USB
Evaluation applied:	☒ MPE Evaluation ☐ SAR Evaluation

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

gain:	3.49 dBi	SRD EMF						
Mode	Frequency (MHz)	Output Power (dBm)	E.I.R.P(dBm)	Tune upPower (dBm)	Max tune up power(dBm)	Calculation Result	1-g SAR	Verdict
GFSK	2402	-3.14	-0.19	-1±1	0	1.00	3	PASS
	2441	-3.5	-0.55	-1±1	0	1.00	3	PASS
	2480	-3.13	-0.18	-1±1	0	1.00	3	PASS

gain:	3.49 dBi	BLE EMF						
Mode	Frequency (MHz)	Output Power (dBm)	E.I.R.P(dBm)	Tune upPower (dBm)	Max tune up power(dBm)	Calculation Result	1-g SAR	Verdict
1M	2402	-2.86	0.63	0±1	1	0.3902263	3	PASS
	2441	-3.35	0.14	0±1	1	0.3933815	3	PASS
	2480	-2.84	0.65	0±1	1	0.3965115	3	PASS
2M	2402	-2.81	0.68	0±1	1	0.3902263	3	PASS
	2441	-3.28	0.21	0±1	1	0.3933815	3	PASS
	2480	-2.83	0.66	0±1	1	0.3965115	3	PASS

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

*** End of Report ***