

EMF TEST REPORT

Test Report No. : OT-264-RWD-078
Reception No. : 2509002935
Applicant : MPIA CO., LTD.
Address : 203-701, 388 Songnae-daero, Wonmi-gu, Bucheon-si, Gyeonggi-do, South Korea
Manufacturer : MPIA CO., LTD.
Address : 203-701, 388 Songnae-daero, Wonmi-gu, Bucheon-si, Gyeonggi-do, South Korea
Type of Equipment : Temperature Detection Sensor
FCC ID. : 2BTDM-MWSF-100
Model Name : MWSF-100
Multiple Model Name : N/A
Serial number : N/A
Total page of Report : 6 pages (including this page)
Date of Incoming : March 29, 2026
Date of issue : April 29, 2026

SUMMARY

The equipment complies with the regulation; **CFR §2.1093**

This test report only contains the result of a single test of the sample supplied for the examination.

It is not a generally valid assessment of the features of the respective products of the mass-production.

This test report is not associated with the accreditation granted by the Korean Laboratory Accreditation Scheme (KOLAS).





Tested by
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Revision History

Rev. No.	Issue Report No.	Issued Date	Revisions	Section Affected
0	OT-264-RWD-078	April 29, 2026	Initial Release	All

1. VERIFICATION OF COMPLIANCE

Applicant : MPIA CO., LTD.

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FCC ID : 2BTDM-MWSF-100

Model Name : MWSF-100

Brand Name : -

Serial Number : N/A

Date : April 29, 2026

E.U.T. DESCRIPTION	Temperature Detection Sensor
THIS REPORT CONCERNS	Original Grant
MEASUREMENT PROCEDURES	KDB 447498 D01 General RF Exposure Guidance v06
TYPE OF EQUIPMENT TESTED	Pre-Production
KIND OF EQUIPMENT AUTHORIZATION REQUESTED	Certification
Modifications on the Equipment to Achieve Compliance	None

-. The above equipment was tested by ONETECH Corp. for compliance with the requirement set forth in the FCC Rules and Regulations. This said equipment in the configuration described in this report, shows the maximum emission levels emanating from equipment are within the compliance requirements.

2. GENERAL INFORMATION

2.1 Product Description

The MPIA CO., LTD., Model MWSF-100 (referred to as the EUT in this report) is a Temperature Detection Sensor. The product specification described herein was obtained from product data sheet or user's manual.

DEVICE TYPE	Temperature Detection Sensor
Temperature Range	-20 °C ~ +60 °C
OPERATING FREQUENCY	920.7 MHz
MODULATION TYPE	GFSK
RF OUTPUT POWER	-2.01 dBm
ANTENNA TYPE	Wire Antenna
ANTENNA GAIN	-7.238 dBi
List of each Osc. or crystal Freq.(Freq. >= 1 MHz)	26 MHz

2.2 Alternative type(s)/model(s); also covered by this test report.

-. None

3. EUT MODIFICATIONS

-. None

4. MAXIMUM PERMISSIBLE EXPOSURE

4.1 RF Exposure Calculation

According to the FCC rule §4.3. General SAR test exclusion guidance, the limit for 1-g and 10-g SAR test exclusion thresholds are ≤ 3.0 for 1-g SAR, and ≤ 7.5 for 10-g extremity SAR by the device operating 100 MHz to 6 GHz and test separation distances ≤ 50 mm

4.2 EUT Description

Kind of EUT	Temperature Detection Sensor
Device Category	☒ Portable (< 20 cm separation) ☐ Mobile (> 20 cm separation) ☐ Others
Exposure Evaluation Applied	☒ MPE ☐ SAR ☐ N/A

4.3 Test Result

Operating Freq. Band (MHz)	Frequency (MHz)	Target Power W/tolerance (dBm)	Max tune up power (dBm)	Max tune up power (mW)	Separation distance (mm)	RF exposure
920.7 [GFSK]	920.7	-2.01 ± 1.0	-1.01	0.79	5	0.152

According to the procedure, KDB 447498 D01, the standalone SAR test exclusion threshold is

$$[(\text{Max. Power of channel, including tune-up tolerance, mW})/(\text{Min. test separation distance, mm})] \times [\sqrt{f(\text{GHz})}] < 3$$

$$= [(0.79/5)] \times \sqrt{0.9207} = 0.152$$