

## Test Report

Prepared for: Transducers Direct

Model: TDWLB5

Description: Wireless pressure and temperature transducer

Serial Number: 993

To

FCC Part 1.1310

Date of Issue: November 11, 2024

On the behalf of the applicant:

Transducers Direct  
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Attention of:

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Reviewed / Authorized By:



**John Michalowicz**  
Test Engineer

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### Test Report Revision History

Revision	Date	Revised By	Reason for Revision
1.0	November 11, 2024	John Michalowicz	Original Document
2.0	January 13, 2025	John Michalowicz	Updated device description Updated test frequency and limit typos

## ANAB

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The tests results contained within this test report all fall within our scope of accreditation, unless noted below.

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**FCC Site Reg. #349717**

**IC Site Reg. #2044A-2**

**Non-accredited tests contained in this report:**

**N/A**

### **EUT Description**

**Model:** TDWLB5

**Description:** wireless pressure and temperature transducer

**Firmware:**

**Software:** NA

**Serial Number:** NA

**Additional Information:** The EUT is a wireless pressure and temperature transducer powered via AC/DC adaptor or DC.

## Minimum Safe Distance Evaluation

This is a mobile device used in Uncontrolled Exposure environment.

### Limits Controlled Exposure 47 CFR 1.1310 Table 1, (A)

0.3-3.0 MHz:	Limit [mW/cm <sup>2</sup> ] = 100
3.0-30 MHz:	Limit [mW/cm <sup>2</sup> ] = (900/f <sup>2</sup> )
30-300 MHz:	Limit [mW/cm <sup>2</sup> ] = 1.0
300-1500 MHz:	Limit [mW/cm <sup>2</sup> ] = f/300
1500-100,000 MHz	Limit [mW/cm <sup>2</sup> ] = 5

### Limits Uncontrolled Exposure 47 CFR 1.1310 Table 1, (B)

0.3-1.234 MHz:	Limit [mW/cm <sup>2</sup> ] = 100
1.34-30 MHz:	Limit [mW/cm <sup>2</sup> ] = (180/f <sup>2</sup> )
30-300 MHz:	Limit [mW/cm <sup>2</sup> ] = 0.2
300-1500 MHz:	Limit [mW/cm <sup>2</sup> ] = f/1500
1500-100,000 MHz	Limit [mW/cm <sup>2</sup> ] = 1.0

## Test Data

Test Frequency, MHz	2402
Power, Conducted, mW (P)	5.69
Antenna Gain Isotropic	6 dBi
Antenna Gain Numeric (G)	3.98
Antenna Type	F-type
Limit (L)	1.0

$S = P \cdot G / 4 \cdot \pi \cdot r^2$			
Power Density (S) mw/cm <sup>2</sup>	Power mW (P)	Numeric Gain (G)	Distance (r2) cm
0.0045054512	5.69	3.98	20

**Note:** Max output power value is obtained from associated report.

The power density is below the 1.0 limit