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TIMCO ENGINEERING, Inc.

An IIA Company

# RF Exposure Evaluation Report

| | |
|---|---|
| **APPLICANT** | ZAXCOM, INC. |
| **ADDRESS** | 230 WEST PARKWAY, UNIT 9<br>POMPTON PLAINS N.J. 07444 USA |
| **FCC ID** | PR6BFI |
| **IC** | 12755A-BFI |
| **MODEL NUMBER** | DEVAIFB |
| **PRODUCT DESCRIPTION** | ISB TRANSMITTER |
| **DATE SAMPLE RECEIVED** | 06/18/2018 |
| **FINAL TEST DATE** | 06/22/2018 |
| **PREPARED BY** | Franklin Rose |
| **TEST RESULTS** | ☒ PASS ☐ FAIL |

| Report Number | Report Version | Description | Issue Date |
|---|---|---|---|
| 885UT18 MPE_TestReport_ | Rev1 | Initial Issue | 06/22/2018 |

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## GENERAL REMARKS

### Summary

The device under test does:

☒ Fulfill the general approval requirements as identified in this test report and was selected by the customer.

☐ Not fulfill the general approval requirements as identified in this test report

### Attestations

This equipment has been tested in accordance with the standards identified in this test report. To the best of my knowledge and belief, these tests were performed using the measurement procedures described in this report.

All instrumentation and accessories used to test products for compliance to the indicated standards are calibrated regularly in accordance with ISO 17025 requirements.

I attest that the necessary measurements were made at:

**Timco Engineering Inc.**
**849 NW State Road 45**
**Newberry, FL 32669**
**Designation #: US1070**

**Prepared by:**

| | |
|---|---|
| **Name and Title** | Franklin Rose, Project Manager / EMC Testing Technician |
| **Date** | 06/22/2018 |

## GENERAL INFORMATION

| | |
|---|---|
| **EUT Description** | ISB TRANSMITTER |
| **FCC ID** | PR6BFI |
| **IC** | 12755A-BFI |
| **Model Number** | DEVAIFB |
| **EUT Power Source** | ☒ 110–120Vac/50– 60Hz |
| | ☐ DC Power (12.0 V) |
| | ☐ Battery Operated Exclusively |
| **Test Item** | ☐ Prototype |
| | ☒ Pre-Production |
| | ☐ Production |
| **Type of Equipment** | ☐ Fixed |
| | ☐ Mobile |
| | ☒ Portable |
| **Antenna Connector** | SMA |
| **Test Conditions** | The temperature was 26ºC<br>Relative humidity of 50%. |
| **Modification to the EUT** | No Modification to EUT. |
| **Applicable Standards** | FCC CFR 47 Part 2.1091 |
| **Test Facility** | Timco Engineering Inc. at 849 NW State Road 45 Newberry, FL 32669 USA. Designation #: US1070 |

## ANTENNA INFORMATION

| Manufacturer Provides Antenna | Type | Max Gain (dBi) |
|---|---|---|
| Yes | 2.4 GHz Quarter Wave whip antenna | **2.2** |

## MPE CALCULATION

The minimum separation distance is calculated as follows:

$$E(V/m) = \frac{\sqrt{30 \times P \times G}}{d} \qquad \text{Power density: } P_d(mW/cm^2) = \frac{E^2}{3770}$$

1. **ISED General <u>Uncontrolled</u> Exposure Environment**: The limit for General Uncontrolled Exposure Environment is calculated as shown in RSS-102:

| Variable | Value |
|---|---|
| Max Power | 0.14 W |
| Duty Cycle (at full power) | 100% |
| Max Antenna Gain | 2.2 dBi |
| Coax Loss | 0 (unspecified) |
| Power Density | 0.04622 W/m$^2$ |
| Minimum Separation Distance | 20 cm |

2. **FCC General Population / <u>Uncontrolled</u> Exposure**: The limit for General Uncontrolled Exposure is calculated as shown in FCC Part 1.1310:

| Variable | Value |
|---|---|
| Max Power | 0.14 W |
| Duty Cycle (at full power) | 100% |
| Max Antenna Gain | 2.2 dBi |
| Coax Loss | 0 (unspecified) |
| Power Density | 0.04622 mW/cm$^2$ |
| Minimum Separation Distance | 20 cm |