849 NW STATE ROAD 45
NEWBERRY, FL 32669 USA

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TIMCO ENGINEERING, Inc.

An IIA Company

RF Exposure Evaluation Report

APPLICANT	AERONIX INC.
ADDRESS	1775 W. HIBISCUS BLVD. #200 MELBOURNE FL 32901
FCC ID	T2KAE102882
MODEL NUMBER	AE102882-xxx
PRODUCT DESCRIPTION	LOW POWEER ISM BAND TRANSCEIVER
DATE SAMPLE RECEIVED	09/16/2019
FINAL TEST DATE	09/17/2019
PREPARED BY	Franklin Rose
TEST RESULTS	☒ PASS ☐ FAIL

Report Number	Report Version	Description	Issue Date
2468UT19 MPE_	Rev1	Initial Issue	09/18/2019

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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 Specialist
Date	05/15/2019

GENERAL INFORMATION

EUT Description	LOW POWEER ISM BAND TRANSCEIVER		
Model Number	AE102882		
EUT Power Source	☐110–120Vac, 50–60Hz	☒ DC Power	☐ Battery Operated
Test Item	☒ Engineering Prototype	☒ Pre-Production	☐ Production
Type of Equipment	☐ Fixed	☒ Mobile	☐ Portable
Antenna(s)	4 dBi Monopole, 6 dBi Monopole		
Duty Cycle	≥ 98%		
Antenna Connector	N Type		
Test Conditions	The temperature was 26ºC 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

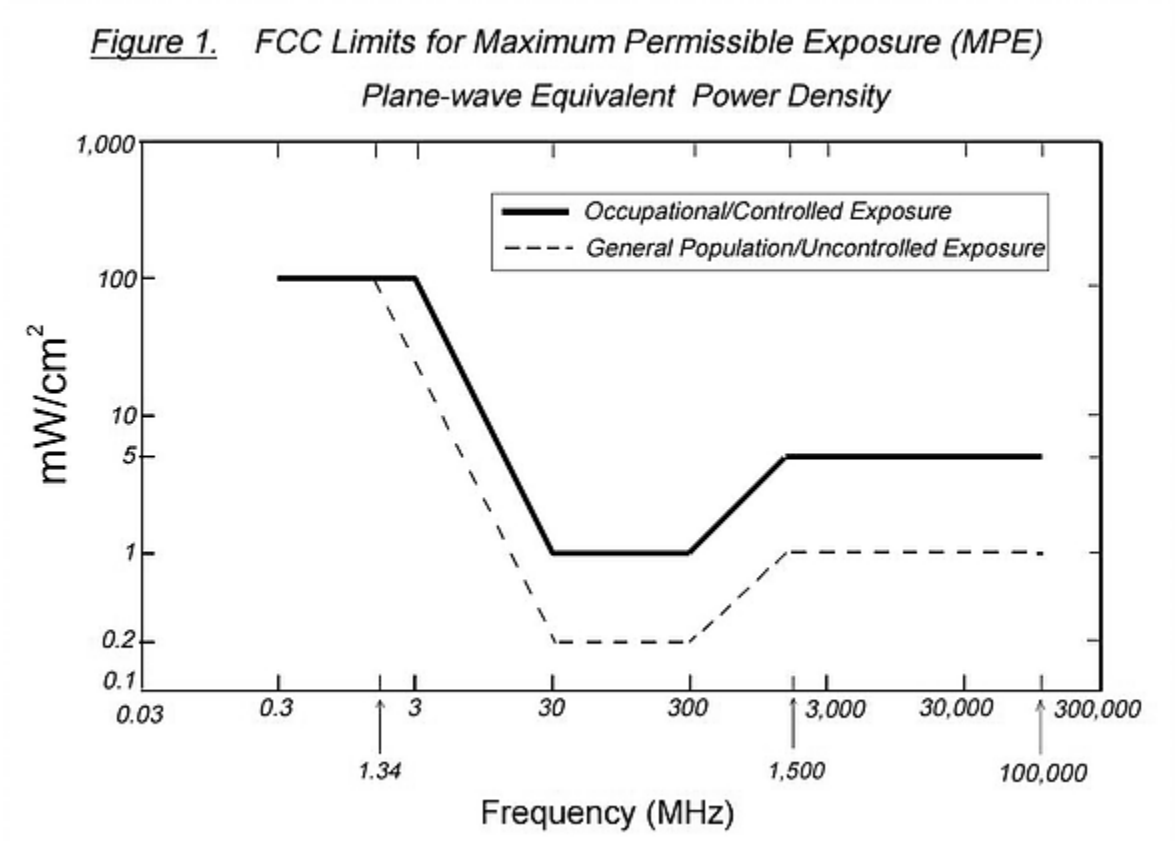
Manufacturer Provides Antenna	Type	Max Gain (dBi)
Yes	Monopole	**4 dBi**
Yes	Monopole	**6 dBi**

MPE CALCULATION

The minimum separation distance is calculated as follows:

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

MPE LIMITS



MPE Table

The limit for General Uncontrolled Exposure Environment is calculated as shown in FCC Pt. 1.1310, Table B, and Occupational/Controlled is calculated as shown in Table A:

Variable	Value
Max Power	644.2 mW
Frequency Range	2400-2483.5 MHz
Duty Cycle (at full power)	98%
Max Antenna Gain	4 dBi
Coax Loss	0 dB
Uncontrolled Power Density	0.32 mW/cm^2
Uncontrolled Minimum Separation Distance	20.0 cm
Controlled Power Density	0.32 mW/cm^2
Controlled Minimum Separation Distance	20.0 cm