



Compliance Testing, LLC

Previously Flom Test Lab

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Test Report

Prepared for: Bird Technologies

Model: 3-26076-XX

Description: Public Safety Class B Signal Booster

Serial Number: N/A

FCC ID: EZZ26076

To

FCC Part 1.1310

Date of Issue: October 28, 2016

On the behalf of the applicant:

**Bird Technologies
30303 Aurora Road
Cleveland, OH 44139**

Attention of:

**Tim O'Brien, Technical Product Manager
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**Prepared By
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Project No: p1680008**

**Alex Macon
Project Test Engineer**

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Test Report Revision History

Revision	Date	Revised By	Reason for Revision
1.0	September 23, 2016	Alex Macon	Original Document

ILAC / A2LA

Compliance Testing, LLC, has been accredited in accordance with the recognized International Standard ISO/IEC 17025:2005. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer joint ISO-ILAC-IAF Communiqué dated January 2009)

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

Please refer to <http://www.compliancetesting.com/labscope.html> for current scope of accreditation.

Testing Certificate Number: **2152.01**



FCC Site Reg. #349717

IC Site Reg. #2044A-2

Non-accredited tests contained in this report:

N/A

EUT Description

Model: 3-26076-XX

Description: Public Safety Class B Signal Booster

Firmware: N/A

Software: N/A

Serial Number: N/A

Additional Information:

The EUT is classified as a Part 90 PS **Class B** industrial signal booster.

The EUT is a Bi-directional Amplifier that operates in the Frequency ranges listed in Table 1.

System Power is 120 VAC @ 60 Hz. The device also has a selection for battery backup at 24 VDC

The emission designators listed in Table 1 are representative emission designators used by transmitters whose signal is amplified by this booster.

Frequency (MHz)	Emission Designators
450 - 512	F3E, G1D, G1E, W7W, F2D



Average Power calculations

Average Power = Peak Power * duty-cycle%

Tuned Frequency (MHz)	Conducted Peak Output Power (mW)	Duty Cycle (%)	Average Power (mW)
460	3320	100	3320mW

All calculations below are with a 0dBi antenna in mind.

20% is added to the highest power in the calculations below.



MPE Evaluation

This is a fixed device used in Uncontrolled Exposure environment.

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

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

Test Data

Test Frequency, MHz	450
Power, Conducted, mW (P)	3984
Antenna Gain Isotropic	0dBi
Antenna Gain Numeric (G)	1
Distance (R)	20 cm

$S = \frac{P * G}{4\pi r^2}$
Power Density (S) mw/cm ²
0.793

Power Density (S) = 0.793
Limit =(from above table) = 0.30

The power density is over the limit so the minimum safe distance was calculated

formula $R = \sqrt{(PG/4\pi L)}$			
Distance (R) (cm)	Power (mW)	Numeric Gain (G)	Limit (mW/cm)
32.51653181	3984	1	0.3

The minimum safe distance is 32.5 cm

END OF TEST REPORT