



Test Report

Prepared for: Bird Technologies

Model: 3-26075-XX

Description: 700MHz Public Safety Class B Signal Booster Module

Serial Number: N/A

FCC ID: EZZ26075

To

FCC Part 1.1310

Date of Issue: November 2, 2016

On the behalf of the applicant:

Bird Technologies
30303 Aurora Road
Cleveland, OH 44139

Attention of:

Tim O'Brien, Technical Product Manager
Ph: (440)519-2194
Email: tobrien@bird-technologies.com

Prepared By
Compliance Testing, LLC
1724 S. Nevada Way
Mesa, AZ 85204
(480) 926-3100 phone / (480) 926-3598 fax
www.compliancetesting.com
Project No: p1680006



Alex Macon
Project Test Engineer

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Test Report Revision History

Revision	Date	Revised By	Reason for Revision
1.0	August 16, 2016	Alex Macon	Original Document
2.0	November 2, 2016	Amanda Reed	Changed frequency range 763–775MHz to 764-775MHz



ILAC / A2LA

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

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FCC Site Reg. #349717

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Non-accredited tests contained in this report:

N/A

EUT Description

Model: 3-26075-XX

Description: 700MHz Public Safety Class B Signal Booster Module

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 12 VDC

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

Table 1

	Frequency (MHz)	Emission Designators
Downlink	764 – 775	F3E, G1D, G1E, W7W, F2D
Uplink	793 - 806	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)
769	1910	100	1910 mW
799	2940	100	2940 mW

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	794
Power, Conducted, mW (P)	3528
Antenna Gain Isotropic	0 dBi
Antenna Gain Numeric (G)	1
Distance (R)	20 cm

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

0.701

Power Density (S) =0.701
Limit =(from above table) = 0.529

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

formula R=√(PG/4πL)	Distance (R) (cm)	Power (mW)	Numeric Gain (G)	Limit (mW/cm)
	23.04313863	3528	1	0.529

The minimum safe distance is 23cm

END OF TEST REPORT